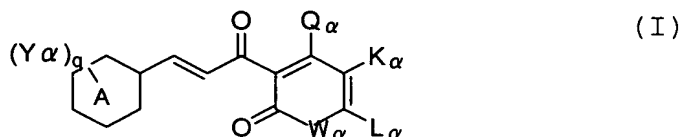


CLAIMS

1. A I type collagen gene transcription suppressing composition, which comprises a cinnamoyl compound represented by the formula (I):



5 [wherein

I. A represents a benzene ring or a pyridine ring, in $(Y_\alpha)_q$, Y_α is a substituent on a carbon atom, and represents a substituent of the following X_0 group or Y_0 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_α 's are the same or different and, when q is 2 or more, the adjacent two same or different Y_α 's constitute a group of a Z_0 group, and may be fused with an A ring;

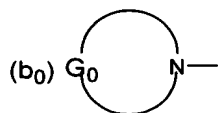
(1) a X_0 group:

a M_a -group [M_a represents a R_b -group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as

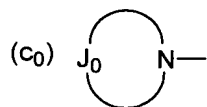
defined above), a $R_eO-CO-R_d$ -group (R_e and R_d are as defined above), a $HO-CO-CH=CH$ -group, a $R_eR_e'N-R_d$ -group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e , and R_d is as defined above),
 5 a $R_bO-CO-NR_e'-R_d$ -group (R_b , R_e' and R_d are as defined above),
 a $R_bO-CO-N(R_e)-R_d$ -group (R_b , R_e and R_d are as defined above),
 a $R_eR_e'N-CO-R_d$ -group (R_e , R_e' and R_d are as defined above), a
 $R_eR_e'N-CO-NR_e''-R_d$ -group (R_e , R_e' and R_e'' are the same or
 different, R_e and R_e' are as defined above, R_e'' has the same
 10 meaning as that of R_e , and R_d is as defined above), a
 $R_eR_e'N-C(=NR_e'')-R_e'''-R_d$ -group (R_e , R_e' , R_e'' and R_e''' are the
 same or different, R_e , R_e' and R_e'' are as defined above,
 R_e''' has the same meaning as that of R_e , and R_d is as
 defined above), a $R_b-SO_2-NR_e-R_d$ -group (R_b , R_e and R_d are as
 15 defined above), a $R_eR_e'N-SO_2-R_d$ -group (R_e , R_e' and R_d are as
 defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl
 group.];

(2) a Y_0 group :

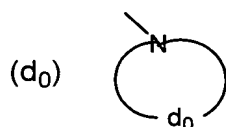
a $M_{b0}-R_d$ -group [M_{b0} represents a M_{c0} -group (M_{c0}
 20 represents a $M_{d0}-R_d'$ -group (M_{d0} represents a 6 to 10-
 membered aryl group optionally substituted with a M_a -group
 (M_a is as defined above), or 5 to 10-membered heteroaryl
 group optionally substituted with M_a group (M_a is as
 defined above), or a 3 to 10-membered hydrocarbon ring or
 25 heterocycle optionally substituted with a M_a -group (M_a is
 defined above) and optionally containing an unsaturated
 bond, or



a (b₀)-group (in (b₀), G₀ constitutes a saturated or unsaturated non-aromatic 5 to 14-membered hydrocarbon ring or heterocycle optionally having a substituent),

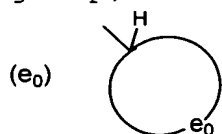


5 a (c₀)-group (in (c₀), J₀ may contain a nitrogen atom, and constitutes an aromatic 5 to 7-membered ring),



10 a (d₀)-group {d₀ represents a 5 to 12-membered hydrocarbon ring substituted with carbonyl group or a thiocarbonyl group and, further, optionally substituted with an oxy group, a thio group, a -NR₁-group {R₁ represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with halogen atom or a R₂-B₁-group (R₂ represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkenyl group, and B₁ represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkenyl group}, a sulfinyl group, or a sulfonyl group} or

15



an (e₀)-group {e₀ constitutes a 5 to 12-membered

hydrocarbon ring optionally substituted with a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a -NR₁-group (R₁ is as defined above), a sulfinyl group or a sulfonyl group}, R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_{c0}-B_a-group (M_{c0} and B_a are as defined above), a M_{c0}-CO-group (M_{c0} is as defined above), a M_{c0}-CO-Ogroup (M_{c0} is as defined above), a M_{c0}O-CO-group (M_{c0} is as defined above), a M_{c0}R_eN-group (M_{c0} and R_e are as defined above), a M_{c0}-CO-NR_e-group (M_{c0} and R_e are as defined above), a M_{c0}O-CO-NR_e-group (M_{c0} and R_e are as defined above), a M_{c0}R_eN-CO-group (M_{c0} and R_e are as defined above), a M_{c0}R_eN-CO-NR_e'-group (M_{c0}, R_e and R_e' are as defined above), a M_{c0}R_eN-C(=NR_e')-NR_e''-group (M_{c0}, R_e, R_e' and R_e' are as defined above), a M_{c0}-SO₂-NR_e-group (M_{c0} and R_e are as defined above) or M_{c0}R_eN-SO₂-group (M_{c0} and R_e are as defined above), and R_d is as defined above.];

(3) a Z₀ group: a group which is a 5 to 12-membered hydrocarbon ring or heterocycle having a halogen atom, a C1-C10 alkoxy group, a C3-C10 alkenyloxy group, a C3-C10 alkynyloxy group, a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a sulfinyl group or a sulfonyl group, is an aromatic or non-aromatic monocyclic or fused ring, and is fused with an A ring;

II. Q_α represents an optionally substituted hydroxyl group, or an optionally substituted amino group;

III. W_α represents an oxygen atom or a-NT_α-group (T_α represents a hydrogen atom, or a substituent on a nitrogen

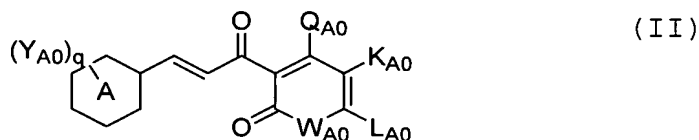
atom.);

IV. K_α and L_α are the same or different, and represent a hydrogen atom, or a substituent on a carbon atom, or K_α and L_α may form a C1-C10 alkylene group optionally having a substituent or a C1-C10 alkenylene group optionally having a substituent; provided that when an A ring is a benzene ring, W_α is an oxygen atom, L_α is a methyl group, K_α is a hydrogen atom, and Q_α is a C1-C4 alkoxy group, a C3-C4 alkenyloxy group or a C3-C4 alkynyloxy group, then q is not 0 and, when an A ring is a benzene ring, W_α is an oxygen atom, L_α is a methyl group, K_α is a hydrogen atom, and Q_α is a C1-C4 alkoxy group, a C3-C4 alkenyloxy group or a C3-C4 alkynyloxy group, then q is 1, and Y_α is not a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a nitro group, or a C1-C4 alkoxy group, or a RB-group (R represents a C1-C4 haloalkyl group, and B represents an oxy group or a thio group) and, when A is a benzene ring, W_α is an oxygen atom, L_α and K_α form a 1,3-butadienylene group, and Q_α is a methoxy group, then q is 1, and Y_α is not a methoxy group or an ethoxy group and, when A is a benzene ring, W_α is an oxygen atom, L_α and K_α form a 1,3-butadienylene group, and Q_α is a hydroxyl group, then q is 1, and Y_α is not an ethoxy group; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as

that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or the different as far as they are selected in the range];
 5 and an inert carrier;

2. A I type collagen gene transcription suppressing composition, which comprises a cinnamoyl compound represented by the formula (II):



[wherein

10 I. A represents a benzene ring or pyridine ring;

II. In $(Y_{A0})_q$, Y_{A0} is a substituent on a carbon atom, and represents a substituent of the following X_0 group and Y_0 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_{A0} 's are the same or different and, when q is 2 or more,
 15 the adjacent two same or different Y_{A0} 's constitute a group of a Z_0 group, and may be fused with an A ring;

(1) a X_0 group:

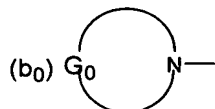
a M_a -group [M_a represents a R_b group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a
 20 hydroxyl group, a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-

C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a R_eR_e'N-R_d-group (R_e and R_e' are the same or different, R_e' has the same meaning as that of R_e and R_d is as defined above), a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bC-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-CO-R_d-group (R_e, R_e' and R_d are as defined above), a R_eR_e'N-CO-NR_e''-R_d-group (R_e, R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e and R_d is as defined above), a R_eR_e'N-C(=NR_e'')-NR_e'''-R_d-group (R_e, R_e', R_e'' and R_e''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as defined above), a R_b-SO₂-NR_e-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-SO₂-R_d-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group.];

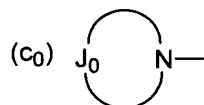
(2) a Y₀ group:

a M_{b0}-R_d-group [M_{b0} represents a M_{c0} group {M_{c0} represents a M_{d0}-R_d'-group {M_{d0} represents a 6 to 10-membered aryl group optionally substituted with a M_a-group (M_a is as defined above), or a 5 to 10-membered heteroaryl group optionally substituted with a M_a-group (M_a is as defined above), a 3 to 10-membered hydrocarbon ring or

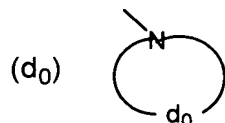
heterocycle optionally substituted with a M_a -group (M_a is as defined above) and optionally containing an unsaturated bond, or



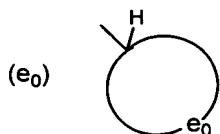
a (b₀)-group (in (b₀), G_0 constitutes a saturated or
5 unsaturated non-aromatic 5 to 14-membered hydrocarbon ring or heterocycle optionally having a substituent),



a (c₀)-group (in (c₀), J_0 may contain a nitrogen atom, and constitutes an aromatic 5 to 7-membered ring),



a (d₀)-group (d_0 constitutes a 5 to 12-membered hydrocarbon
10 ring substituted with a carbonyl group or a thiocarbonyl group and, further, optionally substituted with an oxy group, a thio group, a $-NR_1$ -group (R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2 -B₁-group (R_2
15 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and a B₁ represents an oxy group, a thio group, a sulfinyl group or sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, a sulfinyl group or a sulfonyl group} or



an (e₀)-group {e₀ represents a 5 to 12-membered hydrocarbon ring optionally substituted with a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a -NR₁-group (R₁ is as defined above), a sulfinyl group or a sulfonyl group}, R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_{c0}-B_a-group (M_{c0} and B_a are as defined above), a M_{c0}-CO-group (M_{c0} is as defined above), a M_{c0}-CO-O-group (M_{c0} is as defined above), a M_{c0}O-CO-group (M_{c0} is as defined above), a M_{c0}R_eN-group (M_{c0} and R_e are as defined above), a M_{c0}-CO-NR_e-group (M_{c0} and R_e are as defined above), a M_{c0}O-CO-NR_e-group (M_{c0} and R_e are as defined above), a M_{c0}R_eN-CO-group (M_{c0} and R_e are as defined above), a M_{c0}R_eN-CO-NR_e'-group (M_{c0}, R_e and R_e' are as defined above), a M_{c0}R_eN-C(=NR_e')-NR_e''-group (M_{c0}, R_e, R_e' and R_e'' are as defined above), a M_{c0}-SO₂-NR_e-group (M_{c0} and R_e are as defined above) or M_{c0}R_eN-SO₂-group (M_{c0} and R_e are as defined above), and R_d is as defined above.];

(3) a Z₀ group: a group which is a 5 to 12-membered hydrocarbon ring or heterocycle ring optionally having a halogen atom, a C1-C10 alkoxy group, a C3-C10 alkenyloxy group, a C3-C10 alkynyloxy group, a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a sulfinyl group or a sulfonyl group, is an aromatic or non-aromatic

monocyclic or fused ring, and is fused with an A ring;

III. Q_{A0} represents a hydroxyl group, a (b_0) -group ((b_0) is as defined above), an A_9 - B_6 - B_c -group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6

5 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1)$ -group (m represents 0 or 1, and R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2 - B_1 -group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an A_7'' - SO_2 - B_c -group
 10 (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an A_8 - SO_2 - B_c -group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N$ - SO_2 - B_c -group (R_1 is as defined above, R_1' and
 15 R_1 are the same or different, and has the same meaning as that of R_1 , and B_c is as defined above), a (b_0) - SO_2 - B_c -group ((b_0) and B_c are as defined above), an A_9' - B_c -group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a D_5 - R_4 - B_c -group (D_5
 20 represents a substituent of the following D_5 group, R_4

represents a C1-C10 alkylene group, and B_c is as defined above), a M_{c0}-B₃-B_c-group (B₃ represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_{c0} and B_c are as defined above) or a M_{c0}-B_c-group (M_{c0} and B_c are as defined above);

(1) an A₇ group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R₂-B₁-R₄-group (R₂ and B₁ are as defined above, and R₄ is as defined above), a D₄-R₄-group (D₄ represents a substituent of the following D₄ group, and R₄ is as defined above), a D₅-R₄-group (D₅ represents a substituent of the following D₅ group, and R₄ is as defined above), a D₁-R₄-group {D₁ represents a substituent of the following D₁-group, and R₄ is as defined above}, a (b₀)-R₄-group ((b₀) is as defined above, and R₄ is as defined above), a (c₀)-R₄-group ((c₀) is as defined above, and R₄ is as defined above), a D₂-R₄-group {D₂ represents a substituent of the following D₂ group, and R₄ is as defined above}, a D₃-R₄-group {D₃ represents a substituent of the following D₃ group, and R₄ is as defined above}, an A₄-SO₂-R₄-group {A₄ represents a (b₀)-group ((b₀) is as defined above), a (c₀)-group ((c₀) is as defined above) or a R₁R₁'N-group (R₁ and R₁' are as defined above), and R₄ is as defined above} or an A₂-CO-R₄-group (A₂ represents a substituent of the

following A₂ group, and R₄ is as defined above);

(2) an A₈ group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A₇' group: a C3-C10 alkenyl group optionally

5 substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R₂-B₁-R₄'-group (R₂ and B₁ are as defined above, and R₄' represents a C2-C10 alkylene group), a D₄-R₄'-group (D₄ and R₄' are as defined above), a D₁-R₄'-group (D₁ and R₄' are as defined
10 above), a (b₀)-R₄'-group ((b₀) and R₄' are as defined above), a (c₀)-R₄'-group ((c₀) and R₄' are as defined above), a D₂-R₄-group (D₂ and R₄ are as defined above), a D₃-R₄'-group (D₃ and R₄' are as defined above) or an A₂-CO-R₄-group (A₂ and R₄ are as defined above);

15 (4) an A₈' group: a C1-C10 alkyl group or C2-C10 haloalkyl group;

(5) an A₇'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R₂-B₁-

20 R₄'-group (R₂, B₁ and R₄' are as defined above), a D₄-R₄'-group (D₄ and R₄' are as defined above), a D₅-R₄-group (D₅ and R₄ are as defined above), a D₁-R₄'-group (D₁ and R₄' are as defined above), (b₀)-R₄'-group ((b₀) and R₄' are as defined above), a (c₀)-R₄'-group ((c₀) and R₄' are as
25 defined above), a D₂-R₄-group (D₂ and R₄ are as defined

above), a $\text{NO}_2\text{-R}_4$ -group (R_4 is as defined above) or an $\text{A}_2\text{-CO-}$
 R_4 -group (A_2 and R_4 are as defined above);

(i) a D_4 -group: a hydroxy group or an $\text{A}_1\text{-O-}$ group [A_1
 represents a $\text{R}_3\text{-(CHR}_0)_m\text{-(B}_2\text{-B}_3)_{-m'}$ -group (R_3 represents a
 5 hydrogen atom, or a C1-C10 alkyl group optionally
 substituted with a halogen atom or a $\text{R}_2\text{-B}_1$ -group (R_2 and B_1
 are as defined above), or a C2-C10 alkenyl group, or a C2-
 C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10
 alkyl group or a C2-C10 haloalkyl group, m is as defined
 10 above, B_2 represents a single bond, an oxy group, a thio
 group or a $\text{-N((O)}_n\text{R}_1')$ -group (R_1' is as defined above, and n
 represents 0 or 1), B_3 is as defined above, m' represents 0
 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3
 is not a hydrogen atom}}];

(ii) a D_5 group: an $\text{O=C(R}_3)$ -group (R_3 is as defined above),
 15 an $\text{A}_1\text{-(O)}_n\text{-N=C(R}_3)$ -group (A_1 , n and R_3 are as defined above),
 a $\text{R}_1\text{-B}_0\text{-CO-R}_4\text{-(O)}_n\text{-N=C(R}_3)$ -group [R_1 , R_4 , n and R_3 are as
 defined above, and B_0 represents an oxy group, a thio group
 or a $\text{-N((O)}_m\text{R}_1')$ -group (R_1' and m are as defined above)], a
 20 $\text{D}_2\text{-R}_4\text{-(O)}_n\text{-N=C(R}_3)$ -group (D_2 , R_4 , n and R_3 are as defined
 above) or a $\text{R}_1\text{A}_1\text{N-N=C(R}_3)$ -group (R_1 , A_1 and R_3 are as defined
 above);

(iii) a D_1 group: a $(\text{R}_1\text{-(O)}_k\text{-})\text{A}_1\text{N-(O)}_{k'}$ -group (R_1 and A_1 are
 as defined above, and k and k' are the same or different
 25 and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$ -group (R_1 , R_1' , n and A_1 are as defined above), an $A_1N=C(-OR_2)$ -group (A_1 and R_2 are as defined above) or a NH_2-CS -group;

(v) a D_3 group: a nitro group or a R_1OSO_2 -group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4 -group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group

optionally substituted with a halogen atom, or a C3-C10

alkynyl group optionally substituted with a halogen atom,

or a $R_a-(R_4)_m$ -group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally

substituted with a halogen atom, C1-C10 alkyl group, a C1-

C10 alkoxy group or a nitro group, R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a $(b_0)-R_4$ -

group ((b_0) and R_4 are as defined above), a $((c_0)-R_4$ -group

$((c_0)$ and R_4 are as defined above), a $R_2-B_1-R_4$ -group (R_2 , B_1 and R_4 are as defined above), a D_4-R_4 -group (D_4 and R_4 are

as defined above), a D_5 -group (D_5 is as defined above), a

D_1-R_4 -group (D_1 and R_4 are as defined above), a D_2 -group (D_2 is as defined above), a D_3-R_4 -group (D_3 and R_4 are as

defined above) or an $R_4-SO_2-R_4$ -group (A_4 is as defined above, and R_4 is as defined above);

B_4 represents an oxy group, a thio group or a -

$N((O)_mR_1)$ group (R_1 and m are as defined above), provided that when B_4 is a thio group, then A_3 is not a hydrogen atom.];

2) a $R_1-B_4-CO-R_4-B_4'$ -group (R_1 , B_4 and R_4 are as defined above, B_4' is the same as or different from B_4 , and has the same meaning as that of B_4 , provided that when B_4 is a thio group, then R_2 is not hydrogen atom) or a $D_2-R_4-B_4$ -group (D_2 , R_4 and B_4 are as defined above);

3) a $R_2-SO_2-NR_1$ -group (R_2 is as defined above, provided that a hydrogen atom is excluded; R_1 is as defined above);

4) a (b_0) -group ((b_0) is as defined above);

5) a (c_0) -group ((c_0) is as defined above); or

6) a $R_1-A_1N-NR_1'$ -group (R_1 , A_1 and R_1' are as defined above);

IV. W_{A0} represents an oxygen atom or a $-NT_{A0}$ -group [T_{A0}

represents a hydrogen atom, an A_9' group (A_9' is as defined above), a D_5-R_4 -group (D_5 and R_4 are as defined above) or a M_{C0} -group (M_{C0} is as defined above)];

V. K_{A0} represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_{A0} represents a hydrogen atom, a C1-C10

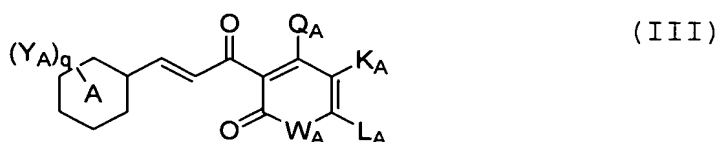
alkyl group or a M_{b0} -group (M_{b0} is as defined above), or K_{A0} and L_{A0} may form a C1-C10 alkylene group, or a C1-C10

alkenylene group optionally substituted with single or the same or different plural M_a groups, provided that when an A ring is a benzene ring, W_{A0} is an oxygen atom, L_{A0} is a

methyl group, K_{A0} is a hydrogen atom, and Q_{A0} is a C1-C4

alkoxy group, a C3-C4 alkenyloxy group or a C3-C4
alkynyloxy group, then q is not 0 and, when an A ring is a
benzene ring, W_{A0} is an oxygen atom, L_{A0} is a methyl group,
K_{A0} is a hydrogen atom, and Q_{A0} is a C1-C4 alkoxy group, a
5 C3-C4 alkenyloxy group or a C3-C4 alkynyloxy group, then q
is 1, and Y_{A0} is not a halogen atom, or a C1-C4 alkyl group
optionally substituted with a halogen atom or a C1-C4
alkoxy group, or a nitro group, or a C1-C4 alkoxy group, or
a RB-group (R represents a C1-C4 haloalkyl group, and B
10 represents an oxy group or a thio group)and, when A is a
benzene ring, W_{A0} is an oxygen atom, L_{A0} and K_{A0} form a 1,3-
butadienylene group, and Q_{A0} is a methoxy group, q is 1,
and Y_{A0} is not a methoxy group or an ethoxy group and, when
A is a benzene ring, W_{A0} is an oxygen atom, L_{A0} and K_{A0} form
15 a 1,3-butadienylene group, and Q_{A0} is a hydroxy group, then
q is 1, and Y_{A0} is not an ethoxy group; and
the "as defined above" in the same symbol between a
plurality of substituents indicates that the plurality of
the substituents independently represent the same meaning
20 as that described above and, between the plurality of
substituents, a selection range of selected substituents is
the same, while the selected substituents may be the same
or the different as far as they are selected in the range];
and an inert carrier;

3. A I type collagen gene transcription suppressing composition, which comprises a cinnamoyl compound represented by the formula (III):

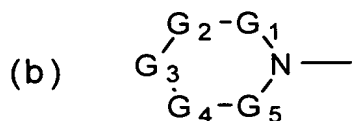


[wherein

- I. A represents a benzene ring or a pyridine ring;
- II. In $(Y_A)_q$, Y_A is a substituent on a carbon atom, and represents a substituent of the following X group or Y group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_A 's are the same or the different and, when q is 2 or more, the adjacent two same or different Y_A 's constitute a group of a Z group, and may be fused with an A ring;
 - (1) a X group: a M_a -group [M_a represents a R_b -group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -group (R_e represents a hydrogen atom, or a C1-C10 alky group optionally substituted with a halogen atom, and R_d is as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as defined above), a R_eO -CO- R_d -group (R_e and R_d

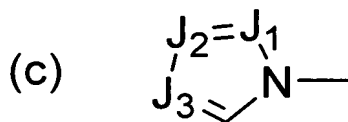
are as defined above), a HO-CO-CH=CH-group, a $R_e R_e' N-R_d$ -group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e , and R_d is as defined above), a $R_e-CO-NR_e'-R_d$ -group (R_e , $R_e'-R_d$ are as defined above), a $R_b O-CO-N(R_e)-R_d$ -group (R_b , R_e and R_d are as defined above), a $R_e R_e' N-CO-R_d$ -group (R_e , R_e' and R_d are as defined above), a $R_e R_e' N-CO-NR_e''-R_d$ -group (R_e , R_e' and R_e'' are the same or different R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e , and R_d is as defined above), a $R_e R_e' N-C(=NR_e'')-NR_e'''-R_d$ -group (R_e , R_e' , R_e'' and R_e''' are the same or different, R_e , R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e and R_d is as defined above), a $R_b-SO_2-NR_e-R_d$ -group (R_b , R_e and R_d are as defined above), a $R_e R_e' N-SO_2-R_d$ -group (R_e , R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group];

(2) a Y group: a M_b-R_d -group [M_b represents a M_c -group (M_c represents a M_d-R_d' -group (M_d represents a phenyl group optionally substituted with a M_a -group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a -group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a -group (M_a is as defined above), or

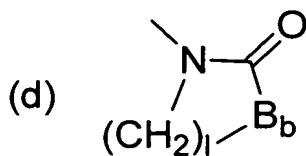


a (b)-group {in (b), G_1 , G_2 , G_4 and G_5 represent a methylene

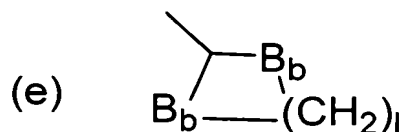
group which is connected to an adjacent atom with a single bond and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1 -group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 is as defined above)),



a (c)-group (in (c), J_1 , J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methine group, or a nitrogen atom),



a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group) or



an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO₂-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO₂-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z group: a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group (Y_b and Y_b'' are the same or different, and represent a methylene group, or an oxy group, or a thio

group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O-$ group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

III. Q_A represents a hydroxyl group, a (b)-group ((b) is as defined above), an $A_9-B_6-B_c$ -group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6

represents a carbonyl group or a thiocarbonyl group, B_c represents an oxy group or a $-N((O)_mR_1)-$ group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, B_c is not a sulfonyl group], an $A_7''-SO_2-B_c$ -group (A_7'' represents a substituent of the following A_7''

group, and B_c is as defined above), an $A_8-SO_2-B_c$ -group (A_8 represents a substituent of the following A_8 group, B_c is as defined above, provided that A_8 is not a hydrogen atom),

a $R_1R_1'N-SO_2-B_c$ -group (R_1 is as defined above, R_1' is the same as or different from R_1 , and has the same meaning as

that of R_1 , and B_c is as defined above), a (b)- SO_2-B_c -group

((b) and B_c are as defined above), an $A_9'-B_c$ -group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a $D_5-R_4-B_c$ -group (D_5

represents a substituent of the following D_5 group, R_4

represents a C1-C10 alkylene group, and B_c is as defined

above), a $M_c-B_3-B_c$ -group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c-B_c -group (M_c and B_c are as defined above);

5 (1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a $R_2-B_1-R_4$ -group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4 -group (D_4 represents a
 10 substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4 -group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4 -group (D_1 represents a substituent of the following D_1 group, and R_4 is as defined above), a (b)- R_4 -group ((b) is
 15 as defined above, and R_4 is as defined above), a (c)- R_4 -group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4 -group (D_2 represents a substituent of the following D_2 group, and R_4 is as defined above), a D_3-R_4 -group (D_3 represents a substituent of the following D_3 group, and R_4
 20 is as defined above), an $A_4-SO_2-R_4$ -group (A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a $R_1R_1'N$ -group (R_1 and R_1' are as defined above), and R_4 is as defined above) or an A_2-CO-R_4 -group (A_2 represents a substituent of the following A_2 group, and R_4
 25 is as defined above);

(2) an A₈ group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A₇' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R₂-B₁-R₄'-group (R₂ and B₁ are as defined above, and R₄' represents a C2-C10 alkylene group), a D₄-R₄'-group (D₄ and R₄' are as defined above), a D₁-R₄'-group (D₁ and R₄' are as defined above), a (b)-R₄'-group ((b) and R₄' are as defined above), a (c)-R₄'-group ((c) and R₄' are as defined above), a D₂-R₄-group (D₂ and R₄ are as defined above), a D₃-R₄'-group (D₃ and R₄' are as defined above) or an A₂-CO-R₄-group (A₂ and R₄ are as defined above);

(4) an A₈' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A₇'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R₂-B₁-R₄'-group (R₂, B₁ and R₄' are as defined above), a D₄-R₄'-group (D₄ and R₄' are as defined above), a D₅-R₄-group (D₅ and R₄ are as defined above), a D₁-R₄'-group (D₁ and R₄' are as defined above), a (b)-R₄'-group ((b) and R₄' are as defined above), a (c)-R₄'-group ((c) and R₄' are as defined above), a D₂-R₄-group (D₂ and R₄ are as defined above), a NO₂-R₄-group (R₄ is as defined above) or an A₂-CO-R₄-group

(A₂ and R₄ are as defined above);

(i) a D₄ group: a hydroxyl group or an A₁-O-group [A₁ represents a R₃-(CHR₀)_m-(B₂-B₃)_{m'}-group {R₃ represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R₂-B₁-group (R₂ and B₁ are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R₀ represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10haloalkyl group, m is as defined above, B₂ represents a single bond, an oxy group, a thio group or a -N(O)_nR₁'-group (R₁' is as defined above, and n represents 0 or 1), B₃ is as defined above, m' represents 0 or 1 and, when B₃ is a sulfonyl group, m is 0, and R₃ is not a hydrogen atom}];

(ii) a D₅ group: O=C(R₃)-group (R₃ is as defined above), an A₁-(O)_n-N=C(R₃)-group (A₁, n and R₃ are as defined above), a R₁-B₀-CO-R₄-(O)_n-N=C(R₃)-group [R₁, R₄, n and R₃ are as defined above, and B₀ represents an oxy group, a thio group or a -N(O)_mR₁'-group (R₁' and m are as defined above)], a D₂-R₄-(O)_n-N=C(R₃)-group (D₂, R₄, n and R₃ are as defined above) or a R₁A₁N-N=C(R₃)-group (R₁, A₁ and R₃ are as defined above);

(iii) a D₁ group: a (R₁-(O)_k-)A₁N-(O)_{k'}-group (R₁ and A₁ are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D group: a cyano group, a R₁R₁'NC' (=N-(O)_n-A₁)-group

(R_1 , R_1' , n and A_1 are as defined above), an $A_1N=C(-O-)$ group

(A_1 and R_2 are as defined above) or a NH_2-CS -group;

(v) a D_3 group: a nitro group or a R_1OSO_2 -group (R_1 is as defined above);

5 (vi) an A_2 group:

1) an A_3-B_4 -group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group

optionally substituted with a halogen atom, or a C3-C10

10 alkynyl group optionally substituted with a halogen atom,

or a $R_a-(R_4)_m$ -group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally

substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as

15 defined above), or a C1-C10 alkyl group substituted with a

(b)- R_4 -group ((b) and R_4 are as defined above), a (c)- R_4 -

group ((c) and R_4 are as defined above), a $R_2-B_1-R_4$ -group

(R_2 , B_1 and R_4 are as defined above), a D_4-R_4 -group (D_4 and R_4 are as defined above), a D_5 -group (D_5 is as defined

20 above), a D_1-R_4 -group (D_1 and R_4 are as defined above), a

D_2 -group (D_2 is as defined above), a D_3-R_4 -group (D_3 and R_4 are as defined above) or an $A_4-SO_2-R_4$ -group (A_4 is as

defined above, and R_4 is as defined above);

B_4 represents an oxy group, a thio group or a -

25 $N((O)_mR_1)-$ group (R_1 and m are as defined above) provided

that when B_4 is a thio group, A_3 is not a hydrogen atom];

2) a $R_1-B_4-CO-R_4-B_4'$ -group (R_1 , B_4 and R_4 are as defined above, B_4' is the same as or different from B_4 , and has the same meaning as that of B_4 , provided that when B_4 is a thio group, a R_2 is not a hydrogen atom) or a $D_2-R_4-B_4$ -group (D_2 , R_4 and B_4 are as defined above);

3) a $R_2-SO_2-NR_1$ -group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above);

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above); or

6) a $R_1A_1N-NR_1'$ -group (R_1 , A_1 and R_1' are as defined above);

IV. W_A represents an oxygen atom or a $-NT_A$ -group [T_A represents a hydrogen atom, an A_9' -group (A_9' is as defined above), a D_5-R_4 -group (D_5 and R_4 are as define above) or a M_c -group (M_c is as defined above)];

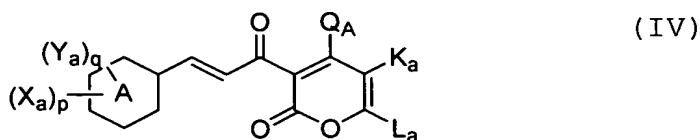
V. K_A represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_A represents a hydrogen atom, a C1-C10 alkyl group or a M_b -group (M_b is as defined above), or K_A and L_A may form a C1-C10 alkylene group or a $-C(M_a')=C(M_a'')-C(M_a''')=C(M_a''')$ -group (M_a' , M_a'' , M_a''' and M_a'''' are the same or different, are the same as or different from M_a , and represent a hydrogen atom or M_a); and

provided that when an A ring is a benzene ring, W_A is an oxygen atom, L_A is a methyl group, K_A is a hydrogen atom, and Q_A is a C1-C10 alkoxy group, a C3-10 alkenyloxy group

or a C3-C10 alkynyloxy group, then q is not 0 and, when an A ring is a benzyl ring, W_A is an oxygen atom, L_A is a methyl group, K_A is a hydrogen atom, and Q_A is a C1-C10 alkoxy group, a C3-C10 alkenyloxy group or a C3-C10 alkynyloxy group, then q is 1, and Y_A is not a halogen atom, or C1-C10 alkyl group optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a nitro group, or a C1-C10 alkoxy group, or a RB-group (R represents a C1-C10haloalkyl group and B represents an oxy group or a thio group) and, when A is a benzene ring, W_A is an oxygen atom, L_A and K_A form a 1,3-butadienylene group, and Q_A is a hydroxyl group or a C1-C10 alkoxy group, then q is 1, and Y_A is not a C1-C10 alkoxy group; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range]; and an inert carrier;

4. A I type collagen gene transcription suppressing composition, which comprises a 2H-pyran-2-one compound represented by the formula (IV):



[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_a)_p$, X_a is a substituent on a carbon atom, and represents a halogen atom, or a C1-C10 alkyl group

optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a nitro group, a C1-C10 alkoxy group, or a RB-group (R represents a C1-C10 haloalkyl group, and B represents an oxy group or a thio group), p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_a 's are the same or different;

III. In $(Y_a)_q$, Y_a is a substituent on a carbon atom, and represents a substituent of the following X_1 group or Y_1 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_a 's are the same or different and, when q is 2 or more, the adjacent two same or different Y_a 's constitute a Z_1 group, and may be fused with an A ring;

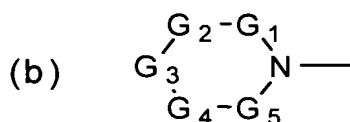
(1) a X_1 group:

a M_a -group [M_a represents a R_b -group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxyl group, a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a

represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as defined above), a R_eO -CO- R_d -group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$ - R_d -group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e , and R_d is as defined above), a R_e -CO-N R_e' - R_d -group (R_e , R_e' and R_d are as defined above), a R_bO -CO-N(R_e)- R_d -group (R_b , R_e and R_d are as defined above), a $R_eR_e'N$ -CO- R_d -group (R_e , R_e' and R_d are as defined above), a $R_eR_e'N$ -CO-N R_e'' - R_d -group (R_e , R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e , and R_d is as defined above), a $R_eR_e'N$ -C(=N R_e'')-N R_e''' - R_d -group (R_e , R_e' , R_e'' and R_e''' are the same or different, R_e , R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e , and R_d is as defined above), a R_b -SO₂-N R_e - R_d -group (R_b , R_e and R_d are as defined above), a $R_eR_e'N$ -SO₂- R_d -group (R_e , R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, a X_a -group (X_a is as defined above) is excluded;

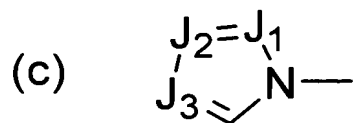
(2) a Y_1 group:

a M_b - R_d -group [M_b represents a M_c -group (M_c represents a M_d - R_d' -group (M_d represents a phenyl group optionally substituted with a M_a -group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a -group (M_a is as defined above) or a naphthyl group optionally substituted with a M_a -group (M_a is as defined above), or

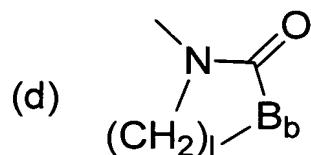


a (b)-group {in (b), G_1 , G_2 , G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2 - B_1 -group (R_2 represents a C1-C10 alkyl group, a C-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group), or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy

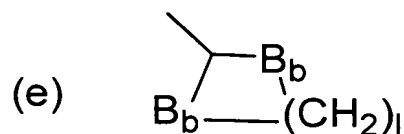
group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 is as defined above)),



a (c)-group (in (c), J_1 , J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),



a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group, or a thio group), or



an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d , and has the same meaning as that of R_d }}, a M_c-B_a -group (M_c and B_a are as defined above), a M_c-CO -group (M_c is as defined above), a M_c-CO-O -group (M_c is as defined above), a M_cO-CO -group (M_c is as defined above), a M_cR_eN -group (M_c and R_e are as defined above), a $M_c-CO-NR_e$ -group (M_c and R_e are as defined above), a $M_cO-CO-NR_e$ -group (M_c and R_e are as defined above), a M_cR_eN-CO -group (M_c and R_e are as defined above), a $M_cR_eN-CO-NR_e'$ -group (M_c , R_e and R_e' are as defined above), a $M_cR_eN-C(=NR_e')-NR_e''$ -

group (M_c , R_e , R_e' and R_e'' are as defined above), a $M_c\text{-SO}_2\text{-NR}_e$ -group (M_c and R_e are as defined above) or a $M_cR_eN\text{-SO}_2$ -group (M_c and R_e are as defined above), and R_d is as defined above];

5 (3) a Z_1 group:

a $\text{-N=C}(Y_a)\text{-Y}_a'$ -group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a $\text{-Y}_b\text{-Y}_b'\text{-Y}_b''$ -group (Y_b and Y_b'' are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $\text{-Y}_c\text{-O-Y}_c'\text{-O-}$ group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

IV. Q_A represents a hydroxyl group, a (b)-group ((b) is as defined above), an $A_9\text{-B}_6\text{-B}_c$ -group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, B_c represents an oxy group or a $\text{-N}((O)_mR_1)\text{-}$ group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, B_c is not a sulfonyl group], an $A_7''\text{-SO}_2\text{-}$

B_c -group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an A_8 -SO₂- B_c -group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen
 5 atom), a R_1R_1' N-SO₂- B_c -group (R_1 is as defined above, R_1' is the same as or different from R_1 , and has the same meaning as that of R_1 , and B_c is as defined above), a (b)-SO₂- B_c -group ((b) and B_c are as defined above), an A_9' - B_c -group (A_9' represents a substituent of the following A_7' group or
 10 A_8' group, and B_c is as defined above), a D_5 - R_4 - B_c -group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), M_c - B_3 - B_c -group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group and M_c and B_c are as
 15 defined above) or a M_c - B_c -group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl
 20 group, a R_2 - B_1 - R_4 -group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4 - R_4 -group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5 - R_4 -group (D_5 represents a substituent of the following D_5 group, R_4 is as defined above), a D_1 - R_4 -group
 25 { D_1 represents a substituent of the following D_1 group, and

R_4 is as defined above}, a (b)- R_4 -group {(b) is as defined above, and R_4 is as defined above}, a (c)- R_4 -group ((c) is as defined above, and R_4 is as defined above), a D_2 - R_4 -group { D_2 represents a substituent of the following D_2 group, and R_4 is as defined above}, a D_3 - R_4 -group { D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4 - SO_2 - R_4 -group { A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a R_1R_1' -N-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2 -CO- R_4 -group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2 - B_1 - R_4' -group (R_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4 - R_4' -group (D_4 and R_4' are as defined above), a D_1 - R_4' -group (D_1 and R_4' are as defined above), a (b)- R_4' -group ((b) and R_4' are as defined above), a (c)- R_4' -group ((c) and R_4' are as defined above), a D_2 - R_4 -group (D_2 and R_4 are as defined above), a D_3 - R_4' -group (D_3 and R_4' are as defined above) or an A_2 -CO- R_4 -group (A_2 and R_4 are as defined above);

(4) an A_8' group: a C1-C10 alkyl group or a C2-C10

haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl

5 group optionally substituted with a halogen atom, a $R_2-B_1-R_4'$ -group (R_2 , B_1 and R_4' are as defined above), a D_4-R_4' -

group (D_4 and R_4' are as defined above), a D_5-R_4 -group (D_5 and R_4 are as defined above), a D_1-R_4' -group (D_1 and R_4' are as defined above), (b)- R_4' -group ((b) and R_4' are as

10 defined above), a (c)- R_4' -group ((c) and R_4' are as defined above), a D_2-R_4 -group (D_2 and R_4 are as defined above), a NO_2-R_4 -group (R_4 is as defined above) or an A_2-CO-R_4 -group (A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxyl group or an A_1-O -group [A_1

15 represents a $R_3-(CHR_0)_m-(B_2-B_3)_{m'}$ -group (R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1 -group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined

20 above, B_2 represents a single bond, an oxy group, a thio group or a $-N(O)_nR_1'$ -group (R_1' is as defined above, and n represents 0 or 1, B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, m is 0, and R_3 is

25 not a hydrogen atom)]];

- (ii) a D_5 group: an $O=C(R_3)$ -group (R_3 is as defined above),
 an $A_1-(O)_n-N=C(R_3)$ -group (A_1 , n and R_3 are as defined above),
 a $R_1-B_0-CO-R_4-(O)_n-N=C(R_3)$ -group [R_1 , R_4 , n and R_3 are as
 defined above, and B_0 represents an oxy group, a thio group
 5 or a $-N((O)_mR_1')$ -group (R_1' and m are as defined above)], a
 $D_2-R_4-(O)_n-N=C(R_3)$ -group (D_2 , R_4 , n and R_3 are as defined
 above) or a $R_1A_1N-N=C(R_3)$ -group (R_1 , A_1 and R_3 are as defined
 above);
- (iii) a D_1 group: a $(R_1-(O)_k)A_1N-(O)_{k'}$ -group (R_1 and A_1 are
 10 as defined above, and k and k' are the same or different,
 and represent 0 or 1);
- (iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A)$ -group
 (R_1 , R_1' , n and N_1 are as defined above), an $A_1N=C(-OR_2)$ -
 group (A_1 and R_2 are as defined above) or a NH_2-CS -group.
- 15 (v) a D_3 group: a nitro group or a R_1OSO_2 -group (R_1 is as
 defined above);
- (vi) an A_2 group:
- 1) an A_3-B_4 -group
- [A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or
 20 a C2-C10 haloalkyl group, or a C2-C10 alkenyl group
 optionally substituted with a halogen atom, or a C3-C10
 alkynyl group optionally substituted with a halogen atom,
 or a $R_a-(R_4)_m$ -group (R_a represents a phenyl group, a pyridyl
 group, a furyl group or a thienyl group, optionally
 25 substituted with a halogen atom, a C1-C10 alkyl group, a

C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)- R_4 -group ((b) and R_4 are as defined above), a (c)- R_4 -group ((c) and R_4 are as defined above), a R_2 - B_1 - R_4 -group (R_2 , B_1 and R_4 are as defined above), a D_4 - R_4 -group (D_4 and R_4 are as defined above), a D_5 -group (D_5 is as defined above), a D_1 - R_4 -group (D_1 and R_4 are as defined above), a D_2 -group (D_2 is as defined above), a D_3 - R_4 -group (D_3 and R_4 are as defined above) or an A_4 -SO₂- R_4 -group (A_4 is as defined above, and R_4 is as defined above);

B_4 represents an oxy group, a thio group or a -N((O)_m R_1)-group (R_1 and m are as defined above), provided that when B_4 is a thio group, A_3 is not a hydrogen atom];

2) a R_1 - B_4 -CO- R_4 - B_4' -group (R_1 , B_4 and R_4 are as defined above, B_4' is the same as or different from B_4 , and has the same meaning as that of B_4 , provided that when B_4 is a thio group, R_2 is not a hydrogen atom) or a D_2 - R_4 - B_4 -group (D_2 , R_4 and B_4 are as defined above);

3) a R_2 -SO₂-NR₁-group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above),

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above); or

6) a R_1A_1N -NR_{1'}-group (R_1 , R_1 and R_1' are as defined above);

V. K_a represents a hydrogen atom, a halogen atom or a C1-

C10 alkyl group, L_a represents a hydrogen atom, a C1-C10

alkyl group or a M_b -group (M_b is as defined above), or K_a and L_a may form a C1-C10 alkylene group, provided that when K_a is a hydrogen atom, L_a is a methyl group and an A ring is a benzene ring, p is 2, 3 or 4 in the case that q is 0;

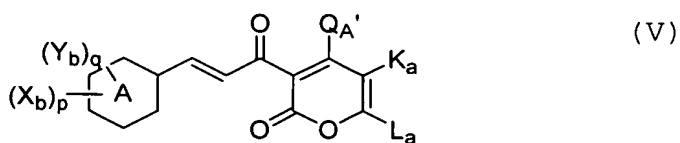
5 and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in a range];

10 and an inert carrier;

5. A 2H-pyran-2-one compound represented by the formula (V):

15



[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_b)_p$, X_b is a substituent on a carbon atom, and represents a halogen atom, or a C1-C10 alkyl group

20 optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a nitro group, or a C2-C10 alkoxy group, or a RB-group (R represents a C1-C10 haloalkyl group, and B

represents an oxy group or a thio group), p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_b 's are the same or different;

III. In $(Y_b)_q$, Y_b is a substituent on a carbon atom, and
 5 represents a substituent of the following X_2 group or Y_2 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_b 's are the same or different and, when q is 2 or more, the adjacent two same or different Y_b 's constitutes a group of a Z_2 group, and may be fused with an A ring;

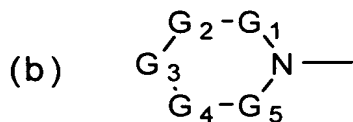
10 (1) a X_2 group:

a M_a -group [M_a represents a R_b -group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c - B_a - R_d -group (R_c represents a C1-C10
 15 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -group (R_e represents a hydrogen atom, or a C1-C10
 20 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as defined above), a R_e O-CO- R_d -group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_{e'}N$ - R_d -group (R_e and $R_{e'}$ are the same or different, R_e is as defined above,
 25 $R_{e'}$ has the same meaning as that of R_e , and R_d is as defined

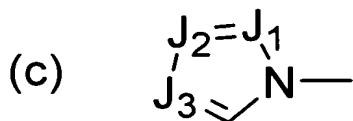
above), a $R_e\text{-CO-NR}_e'\text{-R}_d$ -group (R_e , R_e' and R_d are as defined above), a $R_b\text{O-CO-N}(R_e)\text{-R}_d$ -group (R_b , R_e and R_d are as defined above), a $R_eR_e'\text{N-CO-R}_d$ -group (R_e , R_e' and R_d are as defined above), a $R_eR_e'\text{N-CO-NR}_d''\text{-R}_d$ -group (R_e , R_e' and R_e'' are the same or different, R_e has the same meaning as that of R_e' , R_e'' has the same meaning as that of R_e , and R_d is as defined above), a $R_eR_e'\text{N-C}(=\text{NR}_e'')\text{-NR}_e'''\text{-R}_d$ -group (R_e , R_e' , R_e'' and R_e''' are the same or different, R_e , R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e , and R_d is as defined above), a $R_b\text{-SO}_2\text{-NR}_e\text{-R}_d$ -group (R_b , R_e and R_d are as defined above), a $R_eR_e'\text{N-SO}_2\text{-R}_d$ -group (R_e , R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that, when A represents a benzene ring, then, a halogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a nitro group, or a C1-C10 alkoxy group, or a RB-group (R and B are as described above) is excluded;

(2) a Y_2 group:

a $M_b\text{-R}_d$ -group [M_b represents a M_c -group (M_c represents a $M_d\text{-R}_d'$ -group (M_d represents a phenyl group optionally substituted with a M_a -group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a -group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a -group (M_a is as defined above) or

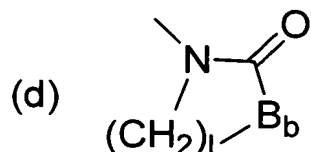


a (b)-group {in (b), G_1 , G_2 , G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group, or a $-NR_1$ -group (R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2 - B_1 -group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a NR_1 - group (R_1 is as defined above)),

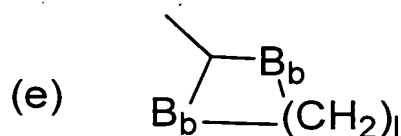


a (c)-group (in(c), J_1 , J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a

methyl group, or a nitrogen atom),



a (d) group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group) or



an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_d' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO₂-NR_e-group (M_c and R_e are as defined above) or M_cR_eN-SO₂-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z₂ group:

a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen

atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted C1-C10 alkyl group), a $-Y_b-Y_b'-Y_b''$ -group (Y_b and Y_b'' are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O$ -group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

III. Q_A' represents a (b)-group ((b) is as defined above), an $A_9-B_6-B_c$ -group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1$ -group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an $A_7''-SO_2-B_c$ -group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an $A_8-SO_2-B_c$ -group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N-SO_2-B_c$ -group (R_1 is as defined above, R_1' is the same as or different from R_1 , and has the same meaning as that of R_1 and B_c is as defined above), a (b)- SO_2-B_c -group ((b) and B_c

are as defined above), an A_9' - B_c -group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a D_5 - R_4 - B_c -group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a M_c - B_3 - B_c -group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c - B_c -group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2 - B_1 - R_4 -group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4 - R_4 -group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5 - R_4 -group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1 - R_4 -group (D_1 represents a substituent of the following D_1 group, and R_4 is as defined above), a (b)- R_4 -group ((b) is as defined above, and R_4 is as defined above), a (c)- R_4 -group ((c) is as defined above, and R_4 is as defined above), a D_2 - R_4 -group (D_2 represents a substituent of the following D_2 group, and R_4 is as defined above), a D_3 - R_4 -group (D_3 represents a substituent of the following D_3 group, and R_4 is as defined above), an A_4 - SO_2 - R_4 -group (A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as

defined above) or a R_1R_1' -N-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2 -CO- R_4 -group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

5 (2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a $C_2-B_1-R_4'$ -
 10 group (C_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4-R_4' -group (D_4 and R_4' are as defined above), a D_1-R_4' -group (D_1 and R_4' are as defined above), a (b)- R_4' -group ((b) and R_4' are as defined above), a (c)- R_4' -group ((c) and R_4' are as defined above), a D_2-R_4 -
 15 group (D_2 and R_4 are as defined above), a D_3-R_4' -group (D_3 and R_4' are as defined above) or an A_2 -CO- R_4 -group (A_2 and R_4 are as defined above);

(4) an A_8 -group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

20 (5) an A_7'' -group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a $R_2-B_1-R_4'$ -group (R_2 , B_1 and R_4' are as defined above), a D_4-R_4' -group (D_4 and R_4' are as defined above), a D_5-R_4 -group (D_5
 25 and R_4 are as defined above), a D_1-R_4' -group (D_1 and R_4' are

as defined above), a (b)-R₄'-group ((b) and R₄' are as defined above), a (c)-R₄'-group ((c) and R₄' are as defined above), a D₂-R₄-group (D₂ and R₄ are as defined above), a NO₂-R₄-group (R₄ is as defined above) or an A₂-CO-R₄-group (A₂ and R₄ are as defined above);

(i) a D₄ group: a hydroxyl group or an A₁-O-group [A₁ represents a R₃-(CHR₀)_m-(B₂-B₃)_{m'}-group {R₃ represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R₂-B₁-group (R₂ and B₁ are as defined above), or a C2-C10 alkenyl group, or a C2-C1 alkynyl group, R₀ represents a hydrogen atom, C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B₂ represents a single bond, an oxy group, a thio group or a -N((O)_nR₁'-group (R₁' is as defined above, and n represents 0 or 1), B₃ is as defined above, and m' represents 0 or 1 and, when B₃ is a sulfonyl group, m is 0, and R₃ is not a hydrogen atom}];

(ii) a D₅ group: O=C(R₃) group (R₃ is as defined above), an A₁-(O)_n-N=C(R₃)-group (A₁, n and R₃ are as defined above), an R₁-B₀-CO-R₄-(O)_n-N=C(R₃)-group [R₁, R₄, n and R₃ are as defined above, and B₀ represents an oxy group, a thio group or a -N((O)_mR₁')-group (R₁' and m are as defined above)], a D₂-R₄-(O)_n-N=C(R₃)-group (D₂, R₄, n and R₃ are as defined above) or a R₁A₁N-N=C(R₃)group (R₁, A₁ and R₃ are as defined above);

(iii) a D_1 group: a $(R_1-(O)_k-)A_1N-(O)_{k'}$ -group (R_1 and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$ -group (R_1 , R_1' , n and A_1 are as defined above), an $A_1N=C(-OR_2)$ -group (A_1 and R_2 are as defined above) or a NH_2-CS -group.

(v) a D_3 group: a nitro group or a R_1OSO_2 -group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4 -group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group

optionally substituted with a halogen atom, or a C3-C10

alkynyl group optionally substituted with a halogen atom,

or a $R_a-(R_4)_m$ -group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally

substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as

defined above), or a C1-C10 alkyl group substituted with a

(b)- R_4 -group ((b) and R_4 are as defined above), a (c)- R_4 -group ((c) and R_4 are as defined above), a $R_2-B_1-R_4$ -group

(R_2 , B_1 and R_4 are as defined above), a D_4-R_4 -group (D_4 and R_4 are as defined above), a D_5 -group (D_5 is as defined

above), a D_1-R_4 -group (D_1 and R_4 are as defined above), a

D_2 -group (D_2 is as defined above), a D_3-R_4 -group (D_3 and R_4

are as defined above) or an $A_4\text{-SO}_2\text{-R}_4$ -group (A_4 is as defined above, and R_4 is as defined above),

B_4 represents an oxy group, a thio group or a $\text{-N}((\text{O})_m\text{R}_1)$ -group (R_1 and m are as defined above), provided
 5 that when B_4 is a thio group, A_3 is not a hydrogen atom];
 2) a $R_1\text{-B}_4\text{-CO-R}_4\text{-B}_4'$ -group (R_1 , B_4 and R_4 are as defined above, B_4' is the same as or different from B_4 , and has the same meaning as that of B_4 provided that when B_4 is a thio group, R_2 is not a hydrogen atom) or a $D_2\text{-R}_4\text{-B}_4$ -group (D_2 , R_4
 10 and B_4 are as defined above);

3) a $R_2\text{-SO}_2\text{-NR}_1$ -group (R_2 is as defined above provided that a hydrogen atom is excluded, and R_1 is as defined above),

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above); or

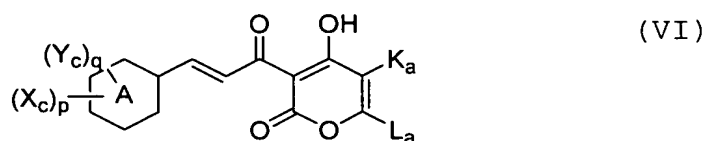
15 6) a $R_1A_1\text{N-NR}_1'$ -group (R_1 , A_1 and R_1' are as defined above);

IV. K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_a represents a hydrogen atom, a C1-C10 alkyl group or a M_b -group (M_b is as defined above), or K_a and L_a may form a C1-C10 alkylene group, provided that when
 20 an A ring is a benzene ring, p is 2, 3 or 4 in the case that q is 0; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as
 25 that described above and, between the plurality of

substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

6. A 2H-pyran-2-one compound represented by the formula (VI):



[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_c)_p$, X_c is a substituent on a carbon atom, and represents a hydroxyl group, or a halogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a C2-C10 alkenyl group, or a $R'-S(O)_1$ -group (R' represents a C1-C10 alkyl group, and 1 represents 0, 1 or 2), or a cyano group, or a C1-C10 alkoxy carbonyl group, or an aminocarbonyl group, or a $(R')_2N$ -group (R' is as defined above), or a $R'CO-NH$ -group (R' is as defined above), or a nitro group, or a C1-C10 alkoxy group, or a RB-group (R represents a C1-C10 haloalkyl group, and B represents an oxy group or a thio group), p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_c 's are the same or different;

III. In $(Y_c)_q$, Y_c is a substituent on a carbon atom, and represents a substituent of the following X_3 group or Y_3

group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_c 's are the same or different and, when q is 2 or more, the adjacent two same or different Y_c 's constitute a group of a Z_3 group, and may be fused with an A ring;

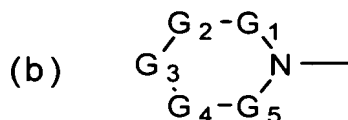
5 (1) a X_3 group:

a M_a -group [M_a represents a R_b -group (R_b represents a C1-C10 alkyl group substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as defined above), a R_eO -CO- R_d -group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$ - R_d -group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e , and R_d is as defined above), a R_e -CO-N R_e' - R_d -group (R_e , R_e' and R_d are as defined above), a R_bO -CO-N(R_e)- R_d -group (R_b , R_e and R_d are as defined above), a $R_eR_e'N$ -CO- R_d -group (R_e , R_e' and R_d are as defined above), a $R_eR_e'N$ -CO-N R_e'' - R_d -group (R_e , R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same

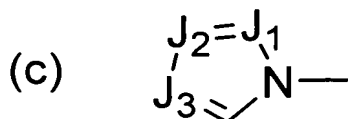
meaning as that of R_e , and R_d is as defined above), a
 $R_e R_e' N-C(=NR_e'')-NR_e'''-R_d$ -group (R_e , R_e' , R_e'' and R_e''' are
the same or different, R_e , R_e' and R_e'' are as defined above,
 R_e''' has the same meaning as that of R_e , and R_d is as
5 defined above), a $R_b-SO_2-NR_e-R_d$ -group (R_b , R_e and R_d are as
defined above), a $R_e R_e' N-SO_2-R_d$ -group (R_e , R_e' and R_d are as
defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl
group], provided that when A represents a benzene ring,
then a hydroxy group, or a halogen atom, or a C1-C10 alkyl
10 group optionally substituted with a halogen atom or a C1-
C10 alkoxy group, or a C2-C10 alkenyl group, or a $R'-S(O)_1$ -
group (R' represents a C1-C10 alkyl group, and 1 represents
0, 1 or 2), or a cyano group, or a C1-C10 alkoxycarbonyl
group, or an aminocarbonyl group, or a $(R')_2N$ -group (R' is
15 as defined above), or a $R'CO-NH$ -group (R' is as defined
above), or a nitro group or a C1-C10 alkoxy group is
excluded;

(2) a Y_3 group:

a M_b-R_d -group [M_b represents a M_c -group (M_c represents
20 a M_d-R_d' -group (M_d represents a phenyl group optionally
substituted with a M_a -group (M_a is as defined above), or a
pyridyl group optionally substituted with a M_a -group (M_a is
as defined above), or a naphthyl group optionally
substituted with a M_a -group (M_a is as defined above), or

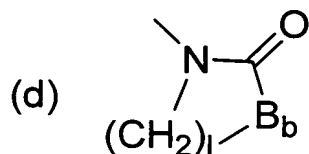


a (b)-group {in (b), G_1 , G_2 , G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1 -group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group) or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 is as defined above)),



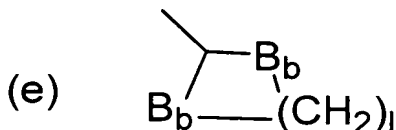
a (c)-group (in (c), J_1 , J_2 and J_3 are the same or different,

and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),



a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group)

or



an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above),

a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO₂-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO₂-group (M_c and R_e are as defined above), and R_d is as defined

above], provided that when P is 0, then a morpholino group, or a phenyl group, or a phenoxy group substituted with a

trifluoromethyl group, or a phenoxy group substituted with single or plural halogen atoms is excluded;

(3) a Z_3 group:

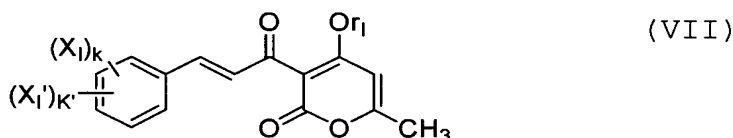
a $-N=C(Y_a)-Y_a'$ -group (Y_a represents a hydrogen atom, or a

5 C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a $-Y_b-Y_b'-Y_b''$ -group (Y_b and Y_b'' are the same or different, and represent a
10 methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group)
15 or a $-Y_c-O-Y_c'-O$ -group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group), provided that when p is 0, then Y_c is not fused with an A ring to form a benzo[1,3]dioxol ring;

IV. K_a represents a hydrogen atom, a halogen atom or a C1-
20 C10 alkyl group, L_a represents a hydrogen atom, a C1-C10 alkyl group or a M_b -group (M_b is as defined above), or K_a and L_a may form a C1-C10 alkylene group, provided that when an A ring is a benzene ring, then q is not 0 and, when an A ring is a benzene ring or a pyridine ring, then p and q are
25 not 0 at the same time, in either case; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above, and between the plurality of substituents, a selection range of selected substituents is the same, while the selected range may be the same or different as far as they are selected in the range];

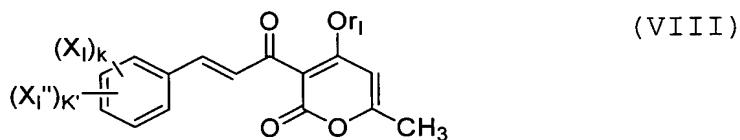
7. A I type collagen gene transcription suppressing composition, which comprises a 2H-pyran-2-one compound represented by the formula (VII):



[wherein X_I represents a C2-C4 alkenyl group, a C2-C4 alkynyl group, a $R_I-S(O)_1$ -group (R_I represents a C1-C4 alkyl group, and 1 represents an integer of 0 to 2), a cyano group, a carboxy group, a C1-C4 alkoxy carbonyl group, a $(R_I)_2N$ -group (R_I is as defined above), a $R_I-CO-NH$ -group (R_I is as defined above), a $R_I O-CO-NH$ -group (R_I is as defined above), a $R_I NH-CO-NH$ -group (R_I is as defined above) or a $(R_I')_2N-CO$ -group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), X_1' represents a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a nitro group, or a C1-C4 alkoxy group, or a RB-group (B represents an oxygen atom or a

sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), k represents 0 or 1, k' represents an integer of 0 to 4, when k is 0, k' is an integer of 2 to 4 and, when k' is 2 to 4, X_I' 's may be different, and r_I is a C1-C4 alkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group], and a inert carrier;

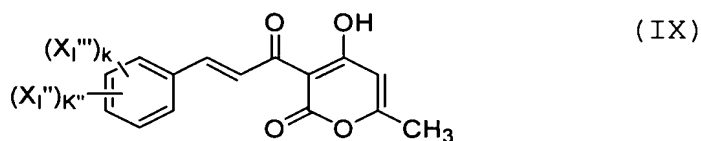
8. A 2H-pyran-2-one compound represented by the formula (VIII):



[wherein X_I represents a C2-C4 alkenyl group, a C2-C4 alkynyl group, a R_I-S(O)₁-group (R_I represents a C1-C4 alkyl group, and 1 represents an integer of 0 to 2), a cyano group, a carboxy group, a C1-C4 alkoxy carbonyl group, a (R_I)₂N-group (R_I is as defined above), a R_I-CO-NH-group (R_I is as defined above), a R_IO-CO-NH-group (R_I is as defined above), a R_INH-CO-NH-group (R_I is as defined above) or (R_I')₂N-CO-group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), X_I'' represents a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a nitro group, or a C2-C4 alkoxy group, or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group

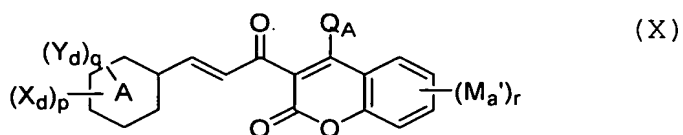
substituted with a halogen atom), k represents 0 or 1, k' represents an integer of 0 to 4, when k is 0, k' is an integer of 2 to 4 and, when k' is 2 to 4, X_I'' 's may be different, and r_I is a C1-C4 alkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group];

9. A 2H-pyran-2-one compound represented by the formula (IX):



[wherein X_I''' represents a C2-C4 alkenyl group, a C2-C4 alkynyl group, a carboxy group, a C2-C4 alkoxycarbonyl group or a $(R_{II})_2N$ -group (R_{II} represents a C2-C4 alkyl group), X_I'' represents a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a nitro group, or a C2-C4 alkoxy group, or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), k represents 0 or 1, k'' represents an integer of 0 to 2, when k is 0, k'' is 2 and, when k'' is 2, X_I'' 's are different];

10. A I type collagen gene transcription suppressing composition, which comprises a 2H-1-benzopyran-2-one compound represented by the formula (X):



[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_d)_p$, X_d is a substituent on a carbon atom, and represents a methoxy group or an ethoxy group, p represents
 5 0, 1, 2, 3 or 4 and, when p is 2 or more, X_d 's are the same or different;

III. In $(Y_d)_q$, Y_d is a substituent on a carbon atom, and represents a substituent of the following X_4 group or Y_4 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more,
 10 Y_d 's are the same or different and, q is 2 or more, the adjacent two same or different Y_d 's constitute a group of a Z_4 group, and may be fused with an A ring;

(1) a X_4 group:

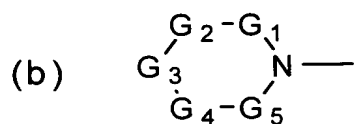
a M_a -group [M_a represents a R_b -group (R_b represents a
 15 C1-C10 alkyl group optionally substituted with a halogen atom), a halogen, atom, a nitro group, a cyano group, a hydroxyl group, a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or
 20 a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -group (R_e represents a hydrogen atom, or a C1-C10

alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as defined above), a R_e O-CO- R_d -group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a R_eR_e' N- R_d -group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e , and R_d is as defined above), a R_e -CO-N R_e' - R_d -group (R_e , R_e' and R_d are as defined above), a R_b O-CO-N(R_e)- R_d -group (R_b , R_e and R_d are as defined above), a R_eR_e' N-CO- R_d -group (R_e , R_e' and R_d are as defined above), a R_eR_e' N-CO-N R_e'' - R_d -group (R_e , R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e , and R_d is as defined above), a R_eR_e' N-C(=N R_e'')-N R_e''' - R_d -group (R_e , R_e' , R_e'' and R_e''' are the same or different, R_e , R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e , and R_d is as defined above), a R_b -SO₂-N R_e - R_d -group (R_b , R_e and R_d are as defined above), a R_eR_e' N-SO₂- R_d -group (R_e , R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, then a methoxy group and an ethoxy group are excluded;

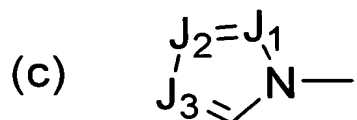
(2) a Y_4 group:

a M_b - R_d -group [M_b represents a M_c -group (M_c represents a M_d - R_d' -group (M_d represents a phenyl group optionally substituted with a M_a -group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a -group (M_a is

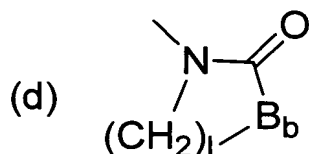
as defined above), or a naphthyl group optionally substituted with a M_a -group (M_a is as defined above), or



a (b)-group {in (b), G_1 , G_2 , G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group optionally substituted with a halogen atom or a R_2 - B_1 -group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group} or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 is as defined above)),

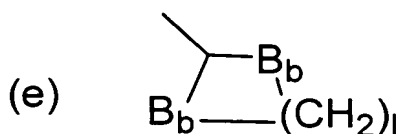


a (c)-group (in (c), J_1 , J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),



5 a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group)

or



an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d , and has the same meaning as that of R_d }}, a M_c - B_a -group (M_c and B_a are as defined above), a M_c -CO-group (M_c is as defined above), a M_c -CO-O-group (M_c is as defined above), a M_c O-CO-group (M_c is as defined above), a M_cR_e N-group (M_c and R_e are as defined above), a M_c -CO- NR_e -group (M_c and R_e are as defined above), a M_c O-CO- NR_e -group (M_c and R_e are as defined above), a M_cR_e N-CO-group (M_c and R_e are as defined above), a M_cR_e N-CO- NR_e' -group (M_c , R_e and R_e' are as defined above), a M_cR_e N-C(=NR $_e'$)- NR_e'' -group (M_c , R_e , R_e' and R_e'' are as defined above), a M_c -SO $_2$ - NR_e -group (M_c and R_e are as defined above) or a M_cR_e N-SO $_2$ -group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z_4 group:

a $-N=C(Y_a)-Y_a'$ -group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a $-Y_b-Y_b'-Y_b''$ -group (Y_b and Y_b'' are the same or different, a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O$ -group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

IV. Q_A represents a hydroxyl group, a (b) group ((b) is as defined above), an $A_9-B_6-B_c$ -group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1)$ -group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an $A_7''-SO_2-B_c$ -group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an $A_8-SO_2-B_c$ -group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not

a hydrogen atom), a $R_1R_1'N-SO_2-B_c$ -group (R_1 is as defined above, R_1' is the same as or different from R_1 , and has the same meaning as that of R_1 , and B_c is as defined above), a (b)- SO_2-B_c -group ((b) and B_c are as defined above), an A_9' - B_c -group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a $D_5-R_4-B_c$ -group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a $M_c-B_3-B_c$ -group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c-B_c -group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a $R_2-B_1-R_4$ -group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4 -group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4 -group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4 -group (D_1 represents a substituent of the following D_1 group, and R_4 is as defined above), a (b)- R_4 -group ((b) is as defined above, and R_4 is as defined above), a (c)- R_4 -group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4 -group (D_2 represents a substituent of the following

D₂ group, and R₄ is as defined above}, a D₃-R₄-group {D₃ represents a substituent of the following D₃ group, and R₄ is as defined above}, an A₄-SO₂-R₄-group {A₄ represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a R₁R₁'N-group (R₁ and R₁' are as defined above), and R₄ is as defined above} or an A₂-CO-R₄-group (A₂ represents a substituent of the following A₂ group, and R₄ is as defined above);

(2) an A₈ group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A₇' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R₂-B₁-R₄'-group (R₂ and B₁ are as defined above, and R₄' represents a C2-C4 alkylene group), a D₄-R₄'-group (D₄ and R₄' are as defined above), a D₁-R₄'-group (D₁ and R₄' are as defined above), a (b)-R₄'-group ((b) and R₄' are as defined above), a (c)-R₄'-group ((c) and R₄' are as defined above), a D₂-R₄-group (D₂ and R₄ are as defined above), a D₃-R₄'-group (D₃ and R₄' are as defined above) or an A₂-CO-R₄-group (A₂ and R₄ are as defined above);

(4) an A₈' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A₇'' group: a C2-C10 alkenyl group, a C3-C10 alkynyl group substituted with a halogen atom, a C3-C10 alkynyl

group optionally substituted with a halogen atom, a $R_2-B_1-R_4'$ -group (R_2 , B_1 and R_4' are as defined above), a D_4-R_4' -group (D_4 and R_4' are as defined above), a D_5-R_4 -group (D_5 and R_4 are as defined above), a D_1-R_4' -group (D_1 and D_4' are as defined above), a (b)- R_4' -group ((b) and R_4' are as defined above), a (c)- R_4' -group ((c) and R_4' are as defined above), a D_2-R_4 -group (D_2 and R_4 are as defined above), a NO_2-R_4 -group (R_4 is as defined above) or an A_2-CO-R_4 -group (A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxy group or an A_1-O -group [A_1 represents a $R_3-(CHRO)_m-(B_2-B_3)_{m'}$ -group (R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1 -group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_mR_1')$ -group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3 is not a hydrogen atom)];

(ii) a D_5 group: an $O=C(R_3)$ -group (R_3 is as defined above), an $A_1-(O)_n-N=C(R_3)$ -group (A_1 , n and R_3 are as defined above), a $R_1-B_0-CO-R_4-(O)_n-N=C(R_3)$ -group [R_1 , R_4 , n and R_3 are as defined above, and B_0 represents an oxy group, a thio group

or a $-N((O)_mR_1')$ -group (R_1' and m are as defined above)], a $D_2-R_4-(O)_n-N=C(R_3)$ -group (D_2 , R_4 , n and R_3 are as defined above) or a $R_1A_1N-N=C(R_3)$ -group (R_1 , A_1 and R_3 are as defined above);

5 (iii) a D_1 group: a $(R_1-(O)_k-)A_1N-(O)_{k'}$ -group (R_1 and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$ -group (R_1 , R_1' , n and A_1 are as defined above), an $A_1N=C(-OR_2)$ -
10 group (A_1 and R_2 are as defined above) or a NH_2-CS -group;

(v) a D_3 group: a nitro group or a R_1OSO_2 -group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4 -group

15 [A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a $R_a-(R_4)_m$ -group (R_a represents a phenyl group, a
20 pyridinyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)- R_4 -group ((b) and R_4 are as defined above), a

25 (c)- R_4 -group ((c) and R_4 are as defined above), a $R_2-B_1-R_4$ -

group (R_2 , B_1 and R_4 are as defined above), a D_4 - R_4 -group (D_4 and R_4 are as defined above), a D_5 -group (D_5 is as defined above), a D_1 - R_4 -group (D_1 and R_4 are as defined above), a D_2 -group (D_2 is as defined above), a D_3 - R_4 -group (D_3 and R_4 are as defined above) or an A_4 - SO_2 - R_4 -group (A_4 is as defined above, and R_4 is as defined above),

B_4 represents an oxy group, a thio group or a -
 $N((O)_mR_1)$ -group (R_1 and m are as defined above), provided
 that when B_4 is a thio group, then A_3 is not a hydrogen
 atom];

2) a R_1 - B_4 - CO - R_4 - B_4' -group (R_1 , B_4 and R_4 are as defined
 above, B_4' is the same as or different from B_4 , and has the
 same meaning as that of B_4 , provided that when B_4 is a thio
 group, then R_2 is not a hydrogen atom) or a D_2 - R_4 - B_4 -group
 (D_2 , R_4 and B_4 are as defined above);

3) a R_2 - SO_2 - NR_1 -group (R_2 is as defined above, provided that
 a hydrogen atom is excluded, and R_1 is as defined above),

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above) or

6) a R_1A_1N - NR_1' -group (R_1 , A_1 and R_1' are as defined above);

V . M_a' is the same as or different from M_a , and has the
 same meaning as that of M_a , and r represents 0, 1, 2, 3 or
 4, provided that when an A ring is a benzene ring, in case
 that q and r are 0, then p is 2, 2, 3 or 4; and

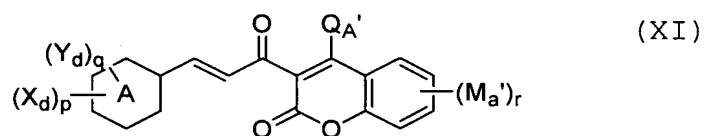
the "as defined above" in the same symbol between a

plurality of substituent indicates that the plurality of the substituents independently represent the same meaning as that of described above and, between the plurality of substituents, a selection range of the selected

5 substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

and an inert carrier;

11. A 2H-1-benzopyran-2-one compound represented by
10 the formula (XI):



[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_d)_p$, X_d is a substituent on a carbon atom, and represents a methoxy group or an ethoxy group, p represents
15 0, 1, 2, 3 or 4 and, when p is 2 or more, X_d 's are the same or different;

III. In $(Y_d)_q$, Y_d is a substituent on a carbon atom, and represents a substituent of the following X_4 group or Y_4 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more,
20 Y_d 's are the same or different and, when q is 2 or more, the adjacent two same or different Y_d 's constitute a group of a Z_4 group, and may be fused with an A ring;

(1) a X_4 group:

a M_a -group [M_a represents a R_b -group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group,

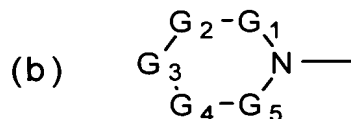
5 a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -
10 group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as defined above), a R_e O-CO- R_d -group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a R_eR_e' N- R_d -group (R_e and R_e'
15 are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e , and R_d is as defined above), a R_e -CO-N R_e' - R_d -group (R_e , R_e' and R_d are as defined above), a R_b O-CO-N(R_e)- R_d -group (R_b , R_e and R_d are as defined above), a R_eR_e' N-CO- R_d -group (R_e , R_e' and R_d are as defined above), a
20 R_eR_e' N-CO-N R_e'' - R_d -group (R_e , R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e , and R_d is as defined above), a
 R_eR_e' N-C(=N R_e'')-N R_e''' - R_d -group (R_e , R_e' , R_e'' and R_e''' are the same or different, R_e , R_e' and R_e'' are as defined above,
25 R_e''' has the same meaning as that of R_e , and R_d is as

defined above), a R_b -SO₂-NR_e-R_d-group (R_b , R_e and R_d are as defined above), a $R_eR_{e'}$ N-SO₂-R_d-group (R_e , $R_{e'}$ and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring,

5 then a methoxy group and an ethoxy group are excluded;

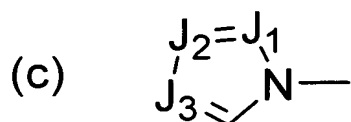
(2) Y₄ group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), a
10 pyridyl group optionally substituted with a M_a-group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

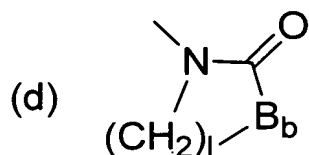


a (b)-group {in (b), G₁, G₂, G₄ and G₅ represent a methylene group which is connected to an adjacent atom with a single
15 bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G₃ represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl
20 group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a -NR₁-group {R₁ represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group

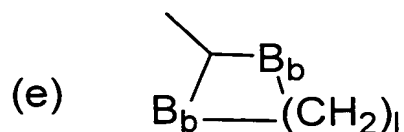
substituted with a halogen atom or a R_2 - B_1 -group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 is as defined above)),



a (c)-group (in (c), J_1 , J_2 , and J_3 are the same or different and, represent a methine group optionally substituted with a methyl group, or a nitrogen atom),



a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group) or



an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d , and has the same meaning as that of R_d }}, a M_c - B_a -group (M_c and B_a are as defined above), a M_c -CO-group (M_c is as defined above), a M_c -CO-O-group (M_c

is as defined above), a M_cO-CO -group (M_c is as defined above), a M_cR_eN -group (M_c and R_e are as defined above), a $M_c-CO-NR_e$ -group (M_c and R_e are as defined above), a $M_cO-CO-NR_e$ -group (M_c and R_e are as defined above), a M_cR_eN-CO -group (M_c and R_e are as defined above), a $M_cR_eN-CO-NR_{e'}$ -group (M_c , R_e and $R_{e'}$ are as defined above), a $M_cR_eN-C(=NR_{e'})-NR_{e''}$ -group (M_c , R_e , $R_{e'}$ and $R_{e''}$ are as defined above), a $M_c-SO_2-NR_e$ -group (M_c and R_e are as defined above) or a $M_cR_eN-SO_2$ -group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z_4 group:

a $-N=C(Y_a)-Y_{a'}$ -group (Y_a represents a hydrogen atom, or C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and $Y_{a'}$ represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a $-Y_b-Y_{b'}-Y_{b''}$ -group (Y_b and $Y_{b''}$ are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, $Y_{b'}$ represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_{c'}-O$ -group (Y_c and $Y_{c'}$ are the same or different, and a C1-C10 alkylene group);

IV. Q_A' represents a (b)-group ((b) is as defined above),

an A_9 - B_6 - BC -group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, B_c represents an oxy group or a $-N((O)_mR_1)$ -group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an A_7'' - SO_2 - B_c -group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an A_8 - SO_2 - B_c -group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N$ - SO_2 - B_c -group (R_1 is as defined above, R_1' is the same as or different from R_1 , and has the same meaning as that of R_1 , and B_c is as defined above), a (b) - SO_2 - B_c -group ((b) and B_c are as defined above), an A_9' - B_c -group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a D_5 - R_4 - B_c -group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a M_c - B_3 - B_c -group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c - B_c -group (M_c and B_c are as defined above);

(1) an A_7 group :

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2 - B_1 - R_4 -group (R_2 and B_1 are as defined above, and

R_4 is as defined above), a D_4 - R_4 -group (D_4 represents a
 substituent of the following D_4 group, and R_4 is as defined
 above), a D_5 - R_4 -group (D_5 represents a substituent of the
 following D_5 group, and R_4 is as defined above), a D_1 - R_4 -
 5 group (D_1 represents a substituent of the following D_1
 group, and R_4 is as defined above), a (b)- R_4 -group ((b) is
 as defined above, and R_4 is as defined above), a (c)- R_4 -
 group ((c) is as defined above, and R_4 is as defined above),
 a D_2 - R_4 -group (D_2 represents a substituent of the following
 10 D_2 group, and R_4 is as defined above), a D_3 - R_4 -group (D_3
 represents a substituent of the following D_3 group, and R_4
 is as defined above), an A_4 - SO_2 - R_4 -group (A_4 represents a
 (b)-group ((b) is as defined above), a (c)-group ((c) is as
 defined above) or a R_1R_1' -N-group (R_1 and R_1' are as defined
 15 above), and R_4 is as defined above) or an A_2 -CO- R_4 -group (A_2
 represents a substituent of the following A_2 group, and R_4
 is as defined above);
 (2) an A_8 group: a hydrogen atom, or C1-C10 alkyl group
 optionally substituted with a halogen atom;
 20 (3) an A_7' group: a C3-C10 alkenyl group optionally
 substituted with a halogen atom, a C3-C10 alkynyl group
 optionally substituted with a halogen atom, a R_2 - B_1 - R_4' -
 group (R_2 and B_1 are as defined above, and R_4' represents a
 C2-C10 alkylene group), a D_4 - R_4' group (D_4 and R_4' are as
 25 defined above), a D_1 - R_4' -group (D_1 and R_4' are as defined

above), a (b)-R₄'-group ((b) and R₄' are as defined above),
 a (c)-R₄'-group ((c) and R₄' are as defined above), a D₂-R₄-
 group (D₂ and R₄ are as defined above), a D₃-R₄'-group (D₃
 and R₄' are as defined above) or an A₂-CO-R₄-group (A₂ and
 5 R₄ are as defined above);

(4) an A₉' group: a C1-C10 alkyl group or a C2-C10
 haloalkyl group;

(5) an A₇'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl
 group substituted with a halogen atom, a C3-C10 alkynyl
 10 group optionally substituted with a halogen atom, a R₂-B₁-
 R₄'-group (R₂, B₁ and R₄' are as defined above), a D₄-R₄'-
 group (D₄ and R₄' are as defined above), a D₅-R₄-group (D₅
 and R₄ are as defined above), a D₁-R₄'-group (D₁ and R₄' are
 as defined above), a (b)-R₄'-group ((b) and R₄' are as
 15 defined above), a (c)-R₄'-group ((c) and R₄' are as defined
 above), a D₂-R₄-group (D₂ and R₄ are as defined above), a
 NO₂-R₄-group (R₄ is as defined above) or an A₂-CO-R₄-group
 (A₂ and R₄ are as defined above);

(i) a D₄ group: a hydroxy group or an A₁-O-group [A₁
 20 represents a R₃-(CHR₀)_m-(B₂-B₃)_m'-group {R₃ represents a
 hydrogen atom, or a C1-C10 alkyl group optionally
 substituted with a halogen atom or a R₂-B₁-group (R₂ and B₁
 are as defined above), or a C2-C10 alkenyl group, or a C2-
 C10 alkynyl group, R₀ represents a hydrogen atom, a C1-C10
 25 alkyl group or a C2-C10haloalkyl group, m is as defined

above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1')$ -group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3 is not a hydrogen atom}};

(ii) a D_5 group: an $O=C(R_3)$ -group (R_3 is as defined above), an $A_1-(O)_n-N=C(R_3)$ -group (A_1 , n and R_3 are as defined above), a $R_1-B_0-CO-R_4-(O)_n-N=C(R_3)$ -group [R_1 , R_4 , n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')$ -group (R_1' and m are as defined above)], a $D_2-R_4-(O)_n-N=C(R_3)$ -group (D_2 , R_4 , n and R_3 are as defined above) or a $R_1A_1N-N=C(R_3)$ -group (R_1 , A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R)-(O)_kA_1N-(O)_{k'}$ -group (R_1 and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$ -group (R_1 , R_1' , n and A_1 are as defined above), an $A_1N=C-(OR_2)$ -group (A_1 and R_2 are as defined above) or a NH_2-CS -group;

(v) a D_3 group: a nitro group or a R_1OSO_2 -group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4 -group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group

optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a $R_a-(R_4)_m$ -group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)- R_4 -group ((b) and R_4 are as defined above), a (c)- R_4 -group ((c) and R_4 are as defined above), a $R_2-B_1-R_4$ -group (R_2 , B_1 and R_4 are as defined above), a D_4-R_4 -group (D_4 and R_4 are as defined above), a D_5 -group (D_5 is as defined above), a D_1-R_4 -group (D_1 and R_4 are as defined above), a D_2 -group (D_2 is as defined above), a D_3-R_4 -group (D_3 and R_4 are as defined above) or an $A_4-SO_2-R_4$ -group (A_4 is as defined above, and R_4 is as defined above),

B_4 represents an oxy group, a thio group or a $-N((O)_mR_1)-$ group (R_1 and m are as defined above), provided that when B_4 is a thio group, A_3 is not a hydrogen atom];

2) a $R_1-B_4-CO-R_4-B_4'$ -group (R_1 , B_4 and R_4 are as defined above, B_4' is the same as or different from B_4 , and has the same meaning as that of B_4 , provided that when B_4 is a thio group, R_2 is not a hydrogen atom), or a $D_2-R_4-B_4$ -group (D_2 , R_4 and B_4 are as defined above);

3) a $R_2-SO_2-NR_1$ -group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above);

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above) or

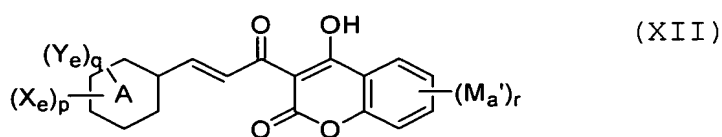
6) a $R_1A_1N-NR_1'$ -group (R_1 , A_1 and R_1' are as defined above);

V. M_a' is the same as or different from M_a , and has the

5 same meaning as that of M_a , and r represents 0, 1, 2, 3 or 4, provided that when an A ring is a benzene ring, in case that q is 0, then p is 2, 3 or 4; and

the "as defined above" between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described
10 above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

15 12. A 2H-1-benzopyran-2-one compound represented by the formula (XII):



[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_e)_p$, X_e represents a hydroxy group, a halogen atom,
20 a C1-C10 alkyl group, a $R'-S(O)_l$ -group (R' represents a C1-C10 alkyl group, and l represents 0, 1 or 2), a cyano group, a $HOCO-CH=CH$ -group, a $(R')_2N$ -group (R' is as defined

above), a R' CO-NH-group (R' is as defined above), a nitro group or a C1-C10 alkoxy group, p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_d's are the same or different;

III. In (Y_e)_q, Y_e is a substituent on a carbon atom, and

5 represents a substituent of the following X₅ group or Y₅ group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_e's are the same or different and, when q is 2 or more, the adjacent two same or different Y_e's constitute a group of a Z₅ group, and may be fused with an A ring;

10 (1) a X₅ group:

a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a

halogen atom, a nitro group, a cyano group, a hydroxyl group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group

15 optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene

group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_d represents a hydrogen atom, or a C1-C10 alkyl

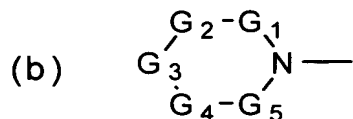
20 group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a R_eR_e'N-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has

25 the same meaning as that of R_e, and R_d is as defined above),

a $R_e\text{-CO-NR}_e'\text{-R}_d$ -group (R_e , R_e' and R_d are as defined above),
 a $R_b\text{O-CO-N(R}_e\text{)-R}_d$ -group (R_b , R_e and R_d are as defined above),
 a $R_eR_e'\text{N-CO-R}_d$ -group (R_e , R_e' and R_d are as defined above), a
 5 $R_eR_e'\text{N-CO-NR}_e''\text{-R}_d$ -group (R_e , R_e' and R_e'' are the same or
 different, R_e and R_e' are as defined above, R_e'' has the same
 meaning as that of R_e , and R_d is as defined above), a
 $R_eR_e'\text{N-C(=NR}_e'')\text{-NR}_e'''\text{-R}_d$ -group (R_e , R_e' , R_e'' and R_e''' are the
 same or different, R_e , R_e' and R_e'' are as defined above,
 R_e''' has the same meaning as that of R_e , and R_d is as
 10 defined above), a $R_b\text{-SO}_2\text{-NR}_e\text{-R}_d$ -group (R_b , R_e and R_d are as
 defined above), a $R_eR_e'\text{N-SO}_2\text{-R}_d$ -group (R_e , R_e' and R_d are as
 defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl
 group], provided that when A represents a benzene ring,
 then a X_e -group (X_e is as defined above) is excluded;

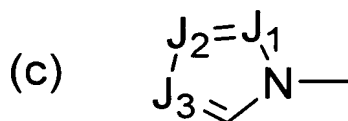
15 (2) a Y_5 group:

a $M_b\text{-R}_d$ -group [M_b represents a M_c -group (M_c represents a $M_d\text{-R}_d'$ -group (M_d represents a phenyl group optionally
 substituted with a M_a -group (M_a is as defined above), or a
 pyridyl group optionally substituted with a M_a -group (M_a is
 20 as defined above), or a naphthyl group optionally
 substituted with a M_a -group (M_a is as defined above), or

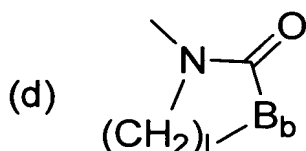


a (b)-group {in (b), G_1 , G_2 , G_4 and G_5 represent a methylene

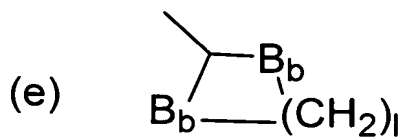
group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group,
 5 and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group
 10 substituted with a halogen atom or a R_2-B_1 -group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10
 15 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 is as defined above)),



a (c)-group (in (c), J_1 , J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),
 20



a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group) or



5 an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined
10 above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e-group
15 (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO₂-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO₂-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z₅ group:

20 a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group

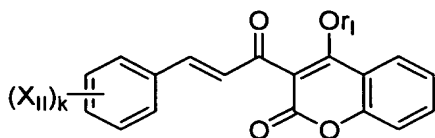
(Y_b and Y_b" are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4
 5 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a -Y_c-O-Y_c'-O-group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group), provided that when p is 0, then Y_e is not fused with an A ring to form a
 10 benzo[1,3]dioxol ring;

IV. M_a' is the same as or different from M_a, and has the same meaning as that of M_a, and r represents 0, 1, 2, 3 or 4, provided that when an A ring is a benzene ring, then q is not 0; and

15 the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is
 20 the same, while the selected substituents may be the same or different as far as they are selected in the range];

13. A 2H-1-benzopyran-2-one compound represented by the formula (XIII):

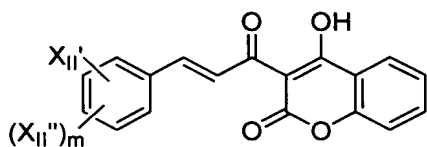
(XIII)



[wherein X_{II} represents a hydrogen atom, or a hydroxyl group, or a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a C2-C4 alkenyl group, or a C2-C4 alkynyl group, or a C3-C4 alkoxy group, or a $R_I-S(O)_1$ -group (R_I represents a C1-C4 alkyl group, and 1 represents an integer of 0 to 2), or a nitro group, or a cyano group, or a carboxy group, or a C1-C4 alkoxycarbonyl group, or a $(R_I)_2N$ -group (R_I is as defined above), or a R_I-CO-N_I -group (R_I is as defined above), or a $R_I O-CO-NH$ -group (R_I is as defined above), or a $R_I NH-CO-NH$ -group (R_I is as defined above), or a $(R_I')_2N-CO$ -group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), k represents an integer of 1 to 4 and, when k is an integer of 2 to 4, X_{II} 's may be different, and r_I represents a C1-C4 alkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group];

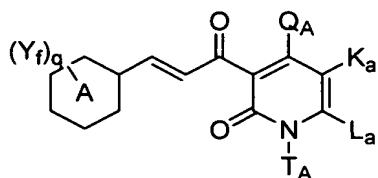
14. A 2H-1-benzopyran-2-one compound represented by the formula (XIV):

(XIV)



[wherein X_{II}' represents a C1-C4 alkyl group substituted with a halogen atom or a C1-C4 alkoxy group, a C2-C4 alkenyl group, a C2-C4 alkynyl group, a C3-C4 alkoxy group, a R_{II} -S(O)₁-group (R_{II} represents a C2-C4 alkyl group, and 1 represents an integer of 0 to 2), a cyano group, a carboxy group, a C₁-C4 alkoxycarbonyl group, a (R_{II})₂N-group (R_{II} is as defined above), a R_I -CO-NH-group (R_I represents a C1-C4 alkyl group), a R_I O-CO-NH-group (R_I is as defined above), a R_I NH-CO-NH-group (R_I is as defined above), a (R_I')₂N-CO-group (R_I' represents a hydrogen atom or a C1-C4 alkyl group) or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), X_{II}'' represents a hydrogen atom, a halogen atom, a C1-C4 alkyl group or a C3-C4 alkoxy group, m represents 1 or 2 and, when m is 2, X_{II}'' 's may be different];

15. A I type collagen gene transcription suppressing composition, which comprises a 2(1H)-pyridinone compound represented by the formula (XV):



(XV)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(Y_f)_q$, Y_f is a substituent on a carbon atom, and represents a group of the following X group or Y group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_f 's are the same or different and, when q is 2 or more, the adjacent two same or different Y_f 's constitutes a group of a Z group, and may be fused with an A ring;

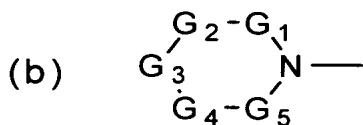
(1) a X group:

10 a M_a -group [M_a represents a R_b -group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents
15 an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is
20 as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as defined above), a R_e O-CO- R_d -group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_{e'}N$ - R_d -group (R_e and $R_{e'}$ are the same or different, R_e is as defined above, $R_{e'}$ has the same meaning as that of R_e , and R_d is as defined above),

a $R_e\text{-CO-NR}_e'\text{-R}_d$ -group (R_e , R_e' and R_d are as defined above),
 a $R_b\text{O-CO-N(R}_e\text{)-R}_d$ -group (R_b , R_e and R_d are as defined above),
 a $R_eR_e'\text{N-CO-R}_d$ -group (R_e , R_e' and R_d are as defined above), a
 5 $R_eR_e'\text{N-CO-NR}_e''\text{-R}_d$ -group (R_e , R_e' and R_e'' are the same or
 different, R_e and R_e' are as defined above, R_e'' has the same
 meaning as that of R_e , and R_d is as defined above), a
 $R_eR_e'\text{N-C(=NR}_e'')\text{-NR}_e'''\text{-R}_d$ -group (R_e , R_e' , R_e'' and R_e''' are the
 same or different, R_e , R_e' and R_e'' are as defined above,
 R_e''' has the same meaning as that of R_e , and R_d is as
 10 defined above), a $R_b\text{-SO}_2\text{-NR}_e\text{-R}_d$ -group (R_b , R_e and R_d are as
 defined above), a $R_eR_e'\text{N-SO}_2\text{-R}_d$ -group (R_e , R_e' and R_d are as
 defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl
 group];

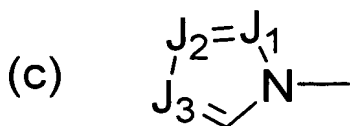
(2) a Y group:

15 a $M_b\text{-R}_d$ -group [M_b represents a M_c -group (M_c represents a $M_d\text{-R}_d'$ -group (M_d represents a phenyl group optionally
 substituted with a M_a -group (M_a is as defined above), or a
 pyridyl group optionally substituted with a M_a -group (M_a is
 as defined above), or a naphthyl group optionally
 20 substituted with a M_a -group (M_a is as defined above), or

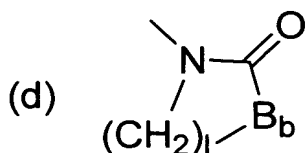


a (b)-group {in (b), G_1 , G_2 , G_4 and G_5 represent a methylene
 group which is connected to an adjacent atom with a single

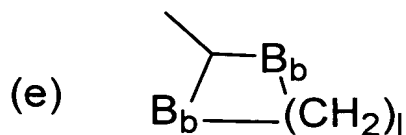
bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G₃ represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a -NR₁-group (R₁ represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R₂-B₁-group (R₂ represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B₁ represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a -NR₁-group (R₁ is as defined above)),



a (c)-group (in (c), J₁, J₂ and J₃ are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),



a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group) or



5 an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined
10 above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group
15 (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO₂-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO₂-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z group: a -N=C(Y_a)-Y_a'-group (Y_a represents a
20 hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an imino group optionally substituted with an oxy group, or a thio group, or a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group (Y_b and Y_b'' are the same or

different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4alkylene group optionally substituted with a halogen atom, or a C1-C4alkylene group optionally having an oxo group), or a $-Y_c-O-Y_c'-O-$ group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

III. Q_A represents a hydroxyl group, a (b)-group ((b) is as defined above), an $A_9-B_6-B_c$ -group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1)-$ group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an $A_7''-SO_2-B_c$ -group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an $A_8-SO_2-B_c$ -group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N-SO_2-B_c$ group (R_1 is as defined above, R_1' is the same as or different of R_1 , and has the same meaning of R_1 , and B_c is as defined above), a (b)- SO_2-B_c -group ((b) and B_c are as defined above), an $A_9'-B_c$ -group (A_9' represents a substituent of the following A_7' group or a A_8' group, and B_c is as defined above), a $D_5-R_4-B_c$ -group

(D₅ represents a substituent of the following D₅ group, R₄ represents a C₁-C₁₀ alkylene group, and B_c is as defined above), a M_c-B₃-B_c-group (B₃ represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c-B_c-group (M_c and B_c are as defined above);

(1) an A₇ group:

a C₂-C₁₀ alkenyl group optionally substituted with a halogen atom, a C₂-C₁₀ alkynyl group, a C₃-C₁₀ haloalkynyl group, a R₂-B₁-R₄-group (R₂ and B₁ are as defined above, and R₄ is as defined above), a D₄-R₄-group (D₄ represents a substituent of the following D₄ group, and R₄ is as defined above), a D₅-R₄-group (D₅ represents a substituent of the following D₅ group, and R₄ is as defined above), a D₁-R₄-group {D₁ represents a substituent of the following D₁ group, and R₄ is as defined above}, a (b)-R₄-group ((b) is as defined above, and R₄ is as defined above), a (c)-R₄-group ((c) is as defined above, and R₄ is as defined above), a D₂-R₄-group {D₂ represents a substituent of the following D₂ group, and R₄ is as defined above}, a D₃-R₄-group {D₃ represents a substituent of the following D₃ group, and R₄ is as defined above}, an A₄-SO₂-R₄-group {A₄ represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a R₁R₁'N-group (R₁ and R₁' are as defined above), and R₄ is as defined above} or an A₂-CO-R₄-group (A₂

represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

5 (3) an $A_{7'}$ group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a $R_2-B_1-R_4'$ -group (R_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4-R_4' -group (D_4 and R_4' are as defined above), a D_1-R_4' -group (D_1 and R_4' are as defined above), a (b)- R_4' -group ((b) and R_4' are as defined above), a (c)- R_4' -group ((c) and R_4' are as defined above), a D_2-R_4 -group (D_2 and R_4 are as defined above), a D_3-R_4' -group (D_3 and R_4' are as defined above) or an A_2-CO-R_4 -group (A_2 and R_4 are as defined above);

10 15

(4) an $A_{8'}$ group: a C1-C10 alkyl group or a 2-C10 haloalkyl group;

(5) an $A_{7''}$ group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a $R_2-B_1-R_4'$ -group (R_2 , B_1 and R_4' are as defined above), a D_4-R_4' -group (D_4 and R_4' are as defined above), a D_5-R_4 -group (D_5 and R_4 are as defined above), a D_1-R_4' -group (D_1 and R_4' are as defined above), a (b)- R_4' -group ((b) and R_4' are as defined above), a (c)- R_4' -group ((c) and R_4' are as defined

20 25

above), a D_2-R_4 -group (D_2 and R_4 are as defined above), a NO_2-R_4 -group (R_4 is as defined above) or an A_2-CO-R_4 -group (A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxy group or an A_1-O -group [A_1 represents a $R_3-(CHR_0)_m-(B_2-B_3)_{m'}$ -group (R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1 -group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1')$ -group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3 is not a hydrogen atom)]]; 15

(ii) a D_5 group: an $O=C(R_3)$ -group (R_3 is as defined above), an $A_1-(O)_n-N=C(R_3)$ -group (A_1 , n and R_3 are as defined above), a $R_1-B_0-CO-R_4-(O)_n-N=C(R_3)$ -group [R_1 , R_4 , n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')$ -group (R_1' and m are as defined above)], a $D_2-R_4-(O)_n-N=C(R_3)$ -group (D_2 , R_4 , n and R_3 are as defined above) or a $R_1A_1N-N=C(R_3)$ -group (R_1 , A_1 and R_3 are as defined above); 20

(iii) a D_1 group: a $(R_1-(O)_k-)A_1N-(O)_{k'}$ -group (R_1 and A_1 are as defined above, and k and k' are the same or different, 25

and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$ -group (R_1 , R_1' , n and A_1 are as defined above), an $A_1N=C(-OR_2)$ -group (A_1 and R_2 are as defined above) or a NH_2-CS -group;

5 (v) a D_3 group: a nitro group or a R_1OSO_2 -group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4 -group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or
 10 a C2-C10 haloalkyl group, or a C2-C10 alkenyl group
 optionally substituted with a halogen atom, or a C3-C10
 alkynyl group optionally substituted with a halogen atom,
 or a $R_a-(R_4)_m$ -group (R_a represents a phenyl group, a pyridyl
 group, a furyl group or a thienyl group, optionally
 15 substituted with a halogen atom, a C1-C10 alkyl group, a
 C1-C10 alkoxy group or a nitro group, and R_4 and m are as
 defined above), or a C1-C10 alkyl group substituted with a
 (b)- R_4 -group ((b) and R_4 are as defined above), a (c)- R_4 -
 group ((c) and R_4 are as defined above)], a $R_2-B_1-R_4$ -group
 20 (R_2 , B_1 and R_4 are as defined above), a D_4-R_4 -group (D_4 and
 R_4 are as defined above), a D_5 -group (D_5 is as defined
 above), a D_1-R_4 -group (D_1 and R_4 are as defined above), a
 D_2 -group (D_2 is as defined above), a D_3-R_4 -group (D_3 and R_4
 are as defined above) or an $A_4-SO_2-R_4$ -group (A_4 is as
 25 defined above, and R_4 is as defined above),

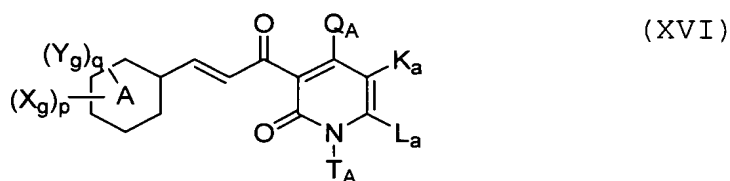
B_4 represents an oxy group, a thio group, or a -
 $N((O)_mR_1)$ -group (R_1 and m are as defined above), provided
 that when B_4 is a thio group, then A_3 is not a hydrogen
 atom];

- 5 2) a $R_1-B_4-CO-R_4-B_4'$ -group (R_1 , B_4 and R_4 are as defined
 above, B_4' is the same as or different from R_4 , and has the
 same meaning as that of B_4 , provided that when R_4 is a thio
 group, then R_2 is not a hydrogen atom) or a $D_2-R_4-B_4$ -group
 (D_2 , R_4 and B_4 are as defined above);
- 10 3) a $R_2-SO_2-NR_1$ -group (R_2 is as defined above, provided that
 a hydrogen atom is excluded, and R_1 is as defined above);
- 4) a (b)-group ((b) is as defined above);
- 5) a (c)-group ((c) is as defined above) or
- 6) a $R_1A_1N-NR_1'$ -group (R_1 , A_1 and R_1' are as defined above);
- 15 IV. T_A represents a hydrogen atom, an A_9' -group (A_9' is as
 defined above), a D_5-R_4 -group (D_5 and R_4 are as defined
 above) or a M_c -group (M_c is as defined above);
- V. K_a represents a hydrogen atom, a halogen atom or a C1-
 C10 alkyl group, L_a represents a hydrogen atom, a C1-C10
 20 alkyl group or a M_b -group (M_b is as defined above) or a K_a
 and L_a may form a C1-C10 alkylene group; and

the "as defined above" in the same symbol between a
 plurality of substituents indicates that the plurality of
 substituents independently represent the same meaning as
 25 that described above and, between the plurality of

substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range]; and an inert carrier;

- 5 16. A 2(1H)-pyridinone compound represented by the formula (XVI):



[wherein

I. A represents a benzene ring or a pyridine ring;

- II. In $(X_g)_p$, X_g represents a hydroxyl group, a halogen atom,
 10 a $(R')_2N$ -group (R' represents a C1-C10 alkyl group), a nitro group or a C1-C10 alkoxy group, p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_g 's are the same or different;

- III. In $(Y_g)_q$, Y_g is a substituent on a carbon atom, and
 15 represents a group of the following X_6 group or Y_6 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_g 's are the same or different and, when q is 2 or more, the adjacent two same or different Y_g 's constitutes a group of a Z_6 group, and may be fused with an A ring;

- 20 (1) a X_6 group:

a M_a -group [M_a represents a R_b -group (R_b represents a C1-C10

alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxyl group, a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents

5 an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is

10 as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as defined above), a R_eO -CO- R_d -group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$ - R_d -group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e , and R_d is as defined above),

15 a R_e -CO-N R_e' - R_d -group (R_e , R_e' and R_d are as defined above), a R_bO -CO-N(R_e)- R_d -group (R_b , R_e and R_d are as defined above), a $R_eR_e'N$ -CO- R_d -group (R_e , R_e' and R_d are as defined above), a $R_eR_e'N$ -CO-N R_e'' - R_d -group (R_e , R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same

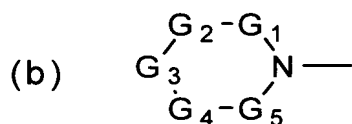
20 meaning as that of a R_e , and R_d is as defined above), a $R_eR_e'N$ -C(=N R_e'')-N R_e''' - R_d -group (R_e , R_e' , R_e'' and R_e''' are the same or different, R_e , R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e , and R_d is as defined above), a R_b -SO₂-N R_e - R_d -group (R_b , R_e and R_d are as

25 defined above), a $R_eR_e'N$ -SO₂- R_d -group (R_e , R_e' and R_d are as

defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, then a X_g -group (X_g is as defined above) is excluded;

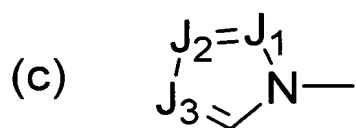
(2) a Y_6 group:

- 5 a M_b - R_d -group [M_b represents a M_c -group (M_c represents a M_d - R_d' -group (M_d represents a phenyl group optionally substituted with a M_a -group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a -group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a -group (M_a is as defined above), or
- 10 substituted with a M_a -group (M_a is as defined above), or

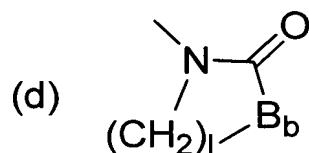


- a (b)-group {in (b), G_1 , G_2 , G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond and may be substituted with a methyl group, and
- 15 G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 represents a hydrogen atom, or a
- 20 C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2 - B_1 -group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl

group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a -NR₁-group (R₁ is as defined above)),

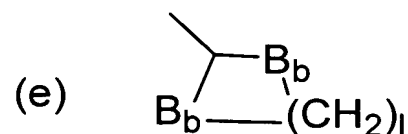


a (c)-group (in (c), J₁, J₂ and J₃ are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),



a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group)

or



an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a

M_c -CO-NR_e-group (M_c and R_e are as defined above), a M_c O-CO-NR_e-group (M_c and R_e are as defined above), a M_c R_eN-CO-group (M_c and R_e are as defined above), a M_c R_eN-CO-NR_e'-group (M_c , R_e and R_e' are as defined above), a M_c R_eN-C(=NR_e')-NR_e''-group (M_c , R_e, R_e' and R_e'' are as defined above), a M_c -SO₂-NR_e-group (M_c and R_e are as defined above) or a M_c R_eN-SO₂-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z₆ group:

a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group (Y_b and Y_b'' are the same or different, a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a -Y_c-O-Y_c'-O-group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

IV. Q_A represents a hydroxyl group, a (b)-group ((b) is as defined above), an A₉-B₆-B_c-group [A₉ represents a substituent of the following A₇ group or A₈ group, B₆

represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1)$ -group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an

5 A_7'' -SO₂- B_c -group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an A_8 -SO₂- B_c -group (A_8 represents a substituent of the following A_8 group, B_1 is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N$ -SO₂- B_c -group (R_1 is as defined

10 above, R_1' is the same as or different from R_1 , and has the same meaning as that of R_1 , and B_c is as defined above), a (b)-SO₂- B_c -group ((b) and B_c are as defined above), an A_9' - B_c -group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a D_5 - R_4 - B_c -

15 group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a M_c - B_3 - B_c -group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above), or a M_c - B_c -group (M_c and B_c are as

20 defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2 - B_1 - R_4 -group (R_2 and B_1 are as defined above, and

25 R_4 is as defined above), a D_4 - R_4 -group (D_4 represents a

substituent of the following D_4 group, and R_4 is as defined above), a D_5 - R_4 -group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1 - R_4 -group (D_1 represents a substituent of the following D_1 group, and R_4 is as defined above), a (b)- R_4 -group ((b) is as defined above, and R_4 is as defined above), a (c)- R_4 -group ((c) is as defined above, and R_4 is as defined above), a D_2 - R_4 -group (D_2 represents a substituent of the following D_2 group, and R_4 is as defined above), a D_3 - R_4 -group (D_3 represents a substituent of the following D_3 group, and R_4 is as defined above), an A_4 - SO_2 - R_4 -group (A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a R_1R_1' -N-group (R_1 and R_1' are as defined above), and R_4 is as defined above) or an A_2 -CO- R_4 group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an $A_{7'}$ group: a C3-C10 alkenyl group optionally

substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2 - B_1 - R_4' -group (R_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4 - R_4' -group (D_4 and R_4' are as defined above), a D_1 - R_4' -group (D_1 and R_4' are as defined above), a (b)- R_4' -group ((b) and R_4' are as defined above),

a (c)-R₄'-group ((c) and R₄' are as defined above), a D₂-R₄-group (D₂ and R₄ are as defined above), a D₃-R₄'-group (D₃ and R₄' are as defined above), and an A₂-CO-R₄-group (A₂ and R₄ are as defined above);

5 (4) an A₈' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A₇" group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R₂-B₁-R₄'-group (R₂, B₁ and R₄' are as defined above), a D₄-R₄'-group (D₄ and R₄' are as defined above), a D₅-R₄-group (D₅ and R₄ are as defined above), a D₁-R₄'-group (D₁ and R₄' are as defined above), a (b)-R₄'-group ((b) and R₄' are as defined above), a (c)-R₄'-group ((c) and R₄' are as defined above), a D₂-R₄-group (D₂ and R₄ are as defined above), a NO₂-R₄-group (R₄ is as defined above) or an A₂-CO-R₄-group (A₂ and R₄ are as defined above);

(i) a D₄ group: a hydroxyl group or an A₁-O-group [A₁ represents a R₃-(CHR₀)_m-(B₂-B₃)_m'-group {R₃ represents a hydrogen atom, or a C1-10 alkyl group optionally substituted with a halogen atom or a R₂-B₁-group (R₂ and B₁ are as defined above), or a C1-C10 alkenyl group, or a C2-C10 alkynyl group, R₀ represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B₂ represents a single bond, an oxy group, a thio

group or a $-N((O)_nR_1')$ -group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, m is 0, and R_3 is not a hydrogen atom}]];

5 (ii) a D_5 group: an $O=C(R_3)$ -group (R_3 is as defined above), an $A_1-(O)_n-N=C(R_3)$ -group (A_1 , n and R_3 are as defined above), a $R_1-B_0-CO-R_4-(O)_n-N=C(R_3)$ -group [R_1 , R_4 , n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')$ -group (R_1' and m are as defined above)], a
10 $D_2-R_4-(O)_n-N=C(R_3)$ -group (D_2 , R_4 , n and R_3 are as defined above) or a $R_1A_1N-N=C(R_3)$ -group (R_1 , A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1-(O)_k-)A_1N-(O)_{k'}$ -group (R_1 and A_1 are as defined above, and k and k' are the same or different,
15 and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$ -group (R_1 , R_1' , n and A_1 are as defined above), an $A_1N=C(-OR_2)$ -group (A_1 and R_2 are as defined above) or a NH_2-CS -group;

(v) a D_3 group: a nitro group or a R_1OSO_2 -group (R_1 is as
20 defined above);

(vi) an A_2 group:

1) an A_3-B_4 -group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group

25 optionally substituted with a halogen atom, or a C3-C10

alkynyl group optionally substituted with a halogen atom,
 or a $R_a-(R_4)_m$ -group (R_a represents a phenyl group, a pyridyl
 group, a furyl group or a thienyl group, optionally
 substituted with a halogen atom, a C1-C10 alkyl group a C1-
 5 C10 alkoxy group or a nitro group, and R_4 and m are as
 defined above), or a C1-C10 alkyl group substituted with a
 (b)- R_4 -group ((b) and R_4 are as defined above), a (c)- R_4 -
 group ((c) and R_4 are as defined above), a $R_2-B_1-R_4$ -group
 (R_2 , B_1 and R_4 are as defined above), a D_4-R_4 -group (D_4 and
 10 R_4 are as defined above), a D_5 -group (D_5 is as defined
 above), a D_1-R_4 -group (D_1 and R_4 are as defined above), a
 D_2 -group (D_2 is as defined above), a D_3-R_4 -group (D_3 and R_4
 are as defined above) or an $A_4-SO_2-R_4$ -group (A_4 is as
 defined above, and R_4 is as defined above),
 15 B_4 represents an oxy group, a thio group or a $-N((O)_mR_1)-$
 group (R_1 and m are as defined above), provided that when
 B_4 is a thio group, then A_3 is not a hydrogen atom];
 2) a $R_1-B_4-CO-R_4-B_4'$ -group (R_1 , B_4 and R_4 are as defined
 above, B_4' is the same as or different from B_4 , and has the
 20 same meaning as that of B_4 , provided that when B_4 is a thio
 group, then R_2 is not a hydrogen atom) or a $D_2-R_4-B_4$ -group
 (D_2 , R_4 and B_4 are as defined above);
 3) a $R_2-SO_2-NR_1$ -group (R_2 is as defined above, provided that
 a hydrogen atom is excluded, and R_1 is as defined above);
 25 4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above) or

6) a $R_1A_1N-NR_1'$ -group (R_1 , A_1 and R_1' are as defined above);

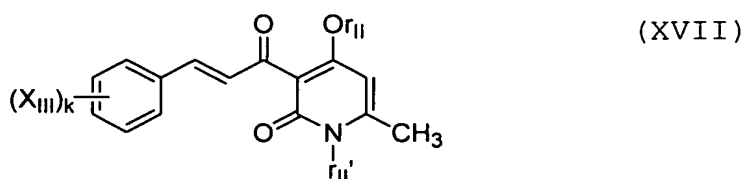
V. T_A represents a hydrogen atom, an A_9' -group (A_9' is as defined above), a D_5-R_4 -group (D_5 and R_4 are as defined

5 above) or a M_c -group (m_c is as defined above);

VI. K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_a represents a hydrogen atom, a C1-C10 alkyl group or a M_b -group (M_b is as defined above), or K_a and L_a may form a C1-C10 alkylene group, provided that when
10 an A ring is a benzene ring, then q is not 0; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of
15 substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

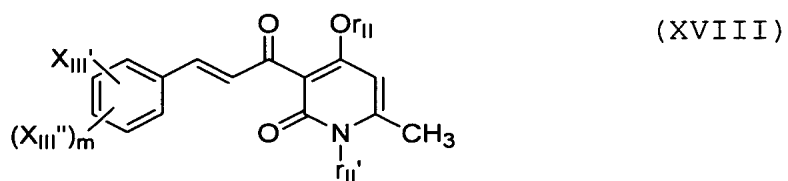
17. A I type collagen gene transcription suppressing composition, which comprises a 2 (1H)-pyridinone compound
20 represented by the formula (XVII):



[wherein XIII represents a hydrogen atom, or a hydroxy

group, or a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a C2-C4 alkenyl group, or a C2-C4 alkynyl group, or a C1-C4 alkoxy group, or a $R_1-S(O)_1$ -group (R_1 represents a C1-C4 alkyl group, and 1 represents an integer of 0 to 2), or a nitro group, or a cyano group, or a carboxy group, or a C1-C4 alkoxycarbonyl group, or a $(R_I)_2N$ -group (R_I is as defined above), or a $R_I-CO-NH$ -group (R_I is as defined above), or a $R_I O-CO-NH$ -group (R_I is as defined above), or a $R_I NH-CO-NH$ -group (R_I is as defined above), or a $(R_I')_2N-CO$ -group (R_I' represents a hydrogen atom or a C1-C4 alkyl group) or a RB -group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), K represents an integer of 1 to 4, when k is an integer of 2 to 4, X_{III} 's may be different, r_{II} and $r_{II'}$ are the same or different, and represent a hydrogen atom or a C1-C4 alkyl group];
and an inert carrier;

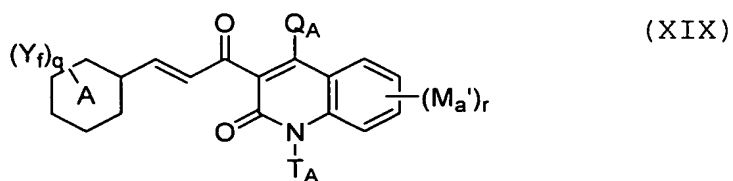
18. A 2(1H)-pyridinone compound represented by the formula (XVIII):



[wherein X_{III}' represents a C2-C4 alkyl group, or a C1-C4

alkyl group substituted with a halogen atom or a C1-C4 alkoxy group, or a C2-C4 alkenyl group, or a C2-C4 alkynyl group, or a C2-C4 alkoxy group, or a $R_I-S(O)_1$ -group (R_I represents a C1-C4 alkyl group, and 1 represents an integer of 0 to 2), or a cyano group, or a carboxy group, or a C1-C4 alkoxycarbonyl group, a $(R_{II})_2N$ -group (R_{II} represents a C2-C4 alkyl group), or a $R_I-CO-NH$ -group (R_I is as defined above), or a $R_I O-CO-NH$ -group (R_I is as defined above), or a $R_I NH-CO-NH$ -group (R_I is as defined above), or a $(R_I')_2N-CO$ -group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), or a RB -group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), X_{III}'' represents a hydrogen atom, a halogen atom, a C1-C4 alkyl group, or a C1-C4 alkoxy group, m represents 1 or 2, when m is 2, X_{III}''' 's may be different, and r_{II} and r_{II}' are the same or different, and represent a hydrogen atom or a C1-C4 alkyl group];

19. A I type collagen gene transcription suppressing composition, which comprises a 2(1H)-quinolinone compound represented by the formula (XIX):



[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(Y_f)_q$, Y_f is a substituent on a carbon atom, and represents a group of the following X group or Y group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_f 's are the same or different and, when q is 2 or more, the adjacent two same or different Y_f 's constitute a group of a Z group, and may be fused with an A ring;

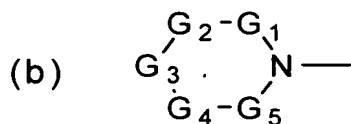
(1) a X group:

10 a M_a -group [M_a represents a R_b -group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxyl group, a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents
15 an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is
20 as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as defined above), a R_e O-CO- R_d -group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a R_eR_e' N- R_d -group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e , and R_d is as defined above),
25 a R_e -CO-N R_e' - R_d -group (R_e , R_e' and R_d are as defined above),

a $R_bO-CO-N(R_e)-R_d$ -group (R_b , R_e and R_d are as defined above),
 a $R_eR_{e'}N-CO-R_d$ -group (R_e , $R_{e'}$ and R_d are as defined above), a
 $R_eR_{e'}N-CO-NR_{e''}-R_d$ -group (R_e , $R_{e'}$ and $R_{e''}$ are the same or
 different, R_e and $R_{e'}$ are as defined above, $R_{e''}$ has the same
 5 meaning as that of R_e , and R_d is as defined above), a
 $R_eR_{e'}N-C(=NR_{e''})-NR_{e'''}-R_d$ -group (R_e , $R_{e'}$, $R_{e''}$ and $R_{e'''}$ are the
 same or different, R_e , $R_{e'}$ and $R_{e''}$ are as defined above,
 $R_{e'''}$ has the same meaning as that of R_e , and R_d is as
 defined above), a $R_b-SO_2-NR_e-R_d$ -group (R_b , R_e and R_d are as
 10 defined above), a $R_eR_{e'}N-SO_2-R_d$ -group (R_e , $R_{e'}$ and R_d are as
 defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl
 group];

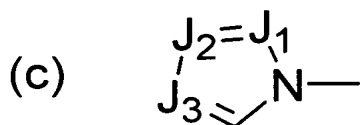
(2) a Y group:

a M_b-R_d -group [M_b represents a M_c -group (M_c represents a M_d -
 15 R_d' -group (M_d represents a phenyl group optionally
 substituted with a M_a -group (M_a is as defined above), or a
 pyridyl group optionally substituted with a M_a -group (M_a is
 as defined above), or a naphthyl group optionally
 substituted with a M_a -group (M_a is as defined above), or

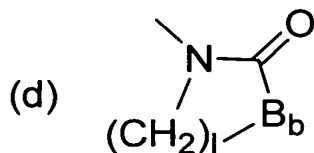


20 a (b)-group {in (b), G_1 , G_2 , G_4 and G_5 represent a
 methylene group which is connected to an adjacent atom with
 a single bond, and may be substituted with a methyl group,

or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1 -group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 is as defined above)),

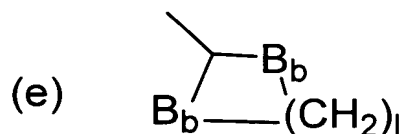


a (c)-group (in (c), J_1 , J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),



a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group)

or



an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above),
 5 a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group
 10 (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO₂-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO₂-group (M_c and R_e are as defined above), and R_d is as defined
 15 above];

(3) a Z group:

a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy
 20 group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group (Y_b and Y_b' are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a

sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O-$ group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

III. Q_A represents a hydroxy group, a (b)-group ((b) is as defined above), an $A_9-B_6-B_c$ -group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1)-$ group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an $A_7''-SO_2-B_c$ -group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an $A_8-SO_2-B_c$ -group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N-SO_2-B_c$ -group (R_1 is as defined above, R_1' is the same as or different from R_1 , and has the same meaning as that of R_1 , and B_c is as defined above), a (b)- SO_2-B_c -group ((b) and B_c are as defined above), an $A_9'-B_c$ -group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a $D_5-R_4-B_c$ -group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as

defined above), a $M_c-B_3-B_c$ -group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c-B_c -group (M_c and B_c are as defined above);

5 (1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a $R_2-B_1-R_4$ -group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4 -group (D_4 represents a
 10 substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4 -group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4 -group (D_1 represents a substituent of the following D_1 group, and R_4 is as defined above), a (b)- R_4 -group ((b) is
 15 as defined above, and R_4 is as defined above), a (c)- R_4 -group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4 -group (D_2 represents a substituent of the following D_2 group, and R_4 is as defined above), a D_3-R_4 -group (D_3 represents a substituent of the following D_3 group, and R_4
 20 is as defined above), an $A_4-SO_2-R_4$ -group (A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a $R_1R_1'N$ -group (R_1 and R_1' are as defined above), and R_4 is as defined above) or an A_2-CO-R_4 -group (A_2 represents a substituent of the following A_2 group, and R_4
 25 is as defined above);

(2) an A₈ group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A₇' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R₂-B₁-R₄'-group (R₂ and B₁ are as defined above, and R₄' represents a C2-C10 alkylene group), a D₄-R₄'-group (D₄ and R₄' are as defined above), a D₁-R₄'-group (D₁ and R₄' are as defined above), a (b)-R₄'-group ((b) and R₄' are as defined above), a (c)-R₄'-group ((c) and R₄' are as defined above), a D₂-R₄-group (D₂ and R₄ are as defined above), a D₃-R₄'-group (D₃ and R₄' are as defined above) or an A₂-CO-R₄-group (A₂ and R₄ are as defined above);

(4) an A₈' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A₇'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R₂-B₁-R₄'-group (R₂, B₁ and R₄' are as defined above), a D₄-R₄'-group (D₄ and R₄' are as defined above), a D₅-R₄-group (D₅ and R₄ are as defined above), a D₁-R₄'-group (D₁ and R₄' are as defined above), a (b)-R₄'-group ((b) and R₄' are as defined above), a (c)-R₄'-group ((c) and R₄' are as defined above), a D₂-R₄-group (D₂ and R₄ are as defined above), a NO₂-R₄-group (R₄ is as defined above) or an A₂-CO-R₄-group

(A₂ and R₄ are as defined above);

(i) a D₄ group: a hydroxy group or an A₁-O-group [A₁ represents a R₃-(CHR₀)_m-(B₂-B₃)_{m'}-group {R₃ represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R₂-B₁-group (R₂ and B₁ are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R₀ represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B₂ represents a single bond, an oxy group, a thio group or a -N((O)_nR₁')-group (R₁' is as defined above, and n represents 0 or 1), B₃ is as defined above, m' represents 0 or 1 and, when B₃ is a sulfonyl group, then m is 0, and R₃ is not a hydrogen atom}];

(ii) a D₅ group: an O=C(R₃)-group (R₃ is as defined above), an A₁-(O)_n-N=C(R₃)-group (A₁, n and R₃ are as defined above), a R₁-B₀-CO-R₄-(O)_n-N=C(R₃)-group [R₁, R₄, n and R₃ are as defined above, and B₀ represents an oxy group, a thio group or a -N((O)_mR₁')-group (R₁' and m are as defined above)], a D₂-R₄-(O)_n-N=C(R₃)-group (D₂, R₄, n and R₃ are as defined above) or a R₁A₁N-N=C(R₃)-group (R₁, A₁ and R₃ are as defined above);

(iii) a D₁ group: a (R₁-(O)_k-)A₁N-(O)_{k'}-group (R₁ and A₁ are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D₂ group: a cyano group, a R₁R₁'NC(=N-(O)_n-A₁)-group

(R_1 , R_1' , n and A_1 are as defined above), an $A_1N=C(-OR_2)-$ group (A_1 and R_2 are as defined above) or a NH_2-CS -group;
 (v) a D_3 group: a nitro group or a R_1OSO_2 -group (R_1 is as defined above);

5 (vi) an A_2 group:

1) an A_3-B_4 -group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom,
 10 or a $R_a-(R_4)_m$ -group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as
 15 defined above), or a C1-C10 alkyl group substituted with a (b)- R_4 -group ((b) and R_4 are as defined above), a (c)- R_4 -group ((c) and R_4 are as defined above), a $R_2-B_1-R_4$ -group (R_2 , B_1 and R_4 are as defined above), a D_4-R_4 -group (D_4 and R_4 are as defined above), a D_5 -group (D_5 is as defined
 20 above), a D_1-R_4 -group (D_1 and R_4 are as defined above), a D_2 -group (D_2 is as defined above), a D_3-R_4 -group (D_3 and R_4 are as defined above) or an $A_4-SO_2-R_4$ -group (A_4 is as defined above, and R_4 is as defined above),

B_4 represents an oxy group, a thio group or a -
 25 $N((O)_mR_1)$ -group (R_1 and m are as defined above), provided

that when B_4 is a thio group, then A_3 is not a hydrogen atom];

2) a $R_1-B_4-CO-R_4-B_4'$ -group (R_1 , B_4 and R_4 are as defined above, B_4' is the same as or different from B_4 , and has the same meaning as that of B_4 , provided that when B_4 is a thio group, then R_2 is not a hydrogen atom) or a $D_2-R_4-B_4$ -group (D_2 , R_4 and B_4 are as defined above);

3) a $R_2-SO_2-NR_1$ -group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above);

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above) or

6) a $R_1A_1N-NR_1'$ -group (R_1 , A_1 and R_1' are as defined above);

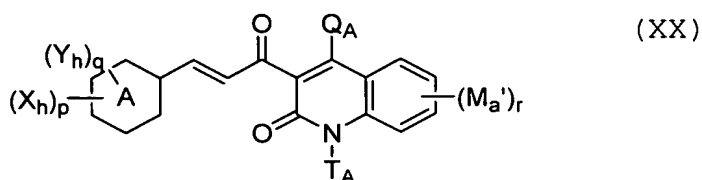
IV. T_A represents a hydrogen atom, an A_9' -group (A_9' is as defined above), a D_5-R_4 -group (D_5 and R_4 are as defined above) or a M_c -group (M_c is as defined above);

V. M_a' is the same as or different from M_a , and has the same meaning as that of M_a , and r represents 0, 1, 2, 3 or 4; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

and an inert carrier;

20. A 2(1H)-pyridinone compound represented by the formula (XX):



[wherein

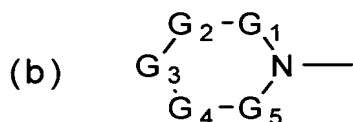
- 5 I. A represents a benzene ring or a pyridine ring;
 - II. In $(X_h)_p$, X_h represents a hydroxy group, a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy carbonyl group, a $(R')_2N$ -group (R' represents a C1-C10 alkyl group), a nitro group or a C1-C10 alkoxy group, p represents 0, 1, 2, 3 or
 10 4 and, when p is 2 or more, X_h 's are the same or different, provided that when p is 2 or more, and in case that X_h is selected from a hydroxy group, a halogen atom, a C1-C10 alkyl group and a C1-C10 alkoxy group, then X_h 's do not represent the same group or atom at the same time;
 - 15 III. In $(Y_h)_q$, Y_h is a substituent on a carbon atom, and represents a substituent of the following X_7 group or Y_7 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_h 's are the same or different and, when q is 2 or more, the adjacent two same or different Y_h 's constitute a group
 20 of a Z_7 group, and may be fused with an A ring;
- (1) a X_7 group:

a M_a -group [M_a represents a R_b -group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c - B_a - R_d -group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d -group (R_d is as defined above), a R_e -CO- R_d -group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e -CO-O- R_d -group (R_e and R_d are as defined above), a R_eO -CO- R_d -group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$ - R_d -group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e , and R_d is as defined above), a R_e -CO-N R_e' - R_d -group (R_e , R_e' and R_d are as defined above), a R_bO -CO-N(R_e)- R_d -group (R_b , R_e and R_d are as defined above), a $R_eR_e'N$ -CO- R_d -group (R_e , R_e' and R_d are as defined above), a $R_eR_e'N$ -CO-N R_e'' - R_d -group (R_e , R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e , and R_d is as defined above), a $R_eR_e''N$ -C(=N R_e'')-N R_e''' - R_d -group (R_e , R_e' , R_e'' and R_e''' are the same or different, R_e , R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e , and R_d is as defined above), a R_b -SO₂-N R_e - R_d -group (R_b , R_e and R_d are as

defined above), a $R_e R_e' N-SO_2-R_d$ -group (R_e , R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, then a X_h -group (X_h is as defined above) is excluded;

5 (2) a Y_7 group:

a M_b-R_d -group [M_b represents a M_c -group (M_c represents a M_d-R_d' -group (M_d represents a phenyl group optionally substituted with a M_a -group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a -group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a -group (M_a is as defined above), or

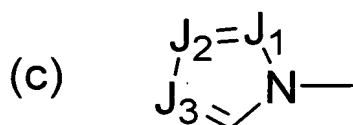


a (b)-group {in (b), G_1 , G_2 , G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$ -group (R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1 -group (R_2

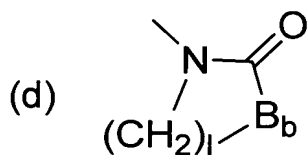
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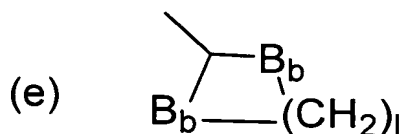
represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B₁ represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a -NR₁-group (R₁ is as defined above)},



a (c)-group (in (c), J₁, J₂ and J₃ are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),



a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group)
or



an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined

above), a M_cR_eN -group (M_c and R_e are as defined above), a $M_c\text{-CO-NR}_e$ -group (M_c and R_e are as defined above), a $M_cO\text{-CO-NR}_e$ -group (M_c and R_e are as defined above), a $M_cR_eN\text{-CO}$ -group (M_c and R_e are as defined above), a $M_cR_eN\text{-CO-NR}_e'$ -group (M_c , R_e and R_e' are as defined above), a $M_cR_eN\text{-C(=NR}_e')\text{-NR}_e''$ -group (M_c , R_e , R_e' and R_e'' are as defined above), a $M_c\text{-SO}_2\text{-NR}_e$ -group (M_c and R_e are as defined above) or a $M_cR_eN\text{-SO}_2$ -group (M_c and R_e are as defined above), and R_d is as defined above];

10 (3) a Z_7 group:

a $\text{-N=C(Y}_a\text{)-Y}_a'$ -group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a $\text{-Y}_b\text{-Y}_b'\text{-Y}_b''$ -group (Y_b and Y_b'' are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom or a C1-C4 alkylene group optionally having an oxo group) or a $\text{-Y}_c\text{-O-Y}_c'\text{-O}$ -group (Y_c and Y_c' are the same or different, or a C1-C10 alkylene group), provided that when p is 0, then Y_h does not fused with an A ring to form a benzo[1,3]dioxol ring;

IV. Q_A represents a hydroxy group, a (b)-group ((b) is as defined above), an A_9 - B_6 - B_c -group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1$ -group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an A_7'' - SO_2 - B_c -group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an A_8 - SO_2 - B_c -group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N$ - SO_2 - B_c -group (R_1 is as defined above, R_1' is the same as or different from R_1 , and has the same meaning as that of R_1 , and B_c is as defined above), a (b)- SO_2 - B_c -group ((b) and B_c are as defined above), an A_9' - B_c -group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a D_5 - R_4 - B_c -group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a M_c - B_3 - B_c -group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c - B_c -group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a

halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2 - B_1 - R_4 -group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4 - R_4 -group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5 - R_4 -group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1 - R_4 -group (D_1 represents a substituent of the following D_1 group, and R_4 is as defined above), a (b)- R_4 -group ((b) is as defined above, and R_4 is as defined above), a (c)- R_4 -group ((c) is as defined above, and R_4 is as defined above), a D_2 - R_4 -group (D_2 represents a substituent of the following D_2 group, and R_4 is as defined above), a D_3 - R_4 -group (D_3 represents a substituent of the following D_3 group, and R_4 is as defined above), an A_4 -SO₂- R_4 -group (A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a R_1R_1' -N-group (R_1 and R_1' are as defined above), and R_4 is as defined above) or an A_2 -CO₂- R_4 -group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2 - B_1 - R_4' -

group (R_2 and B_1 are as defined above, and R_4' represents a

C2-C10 alkylene group), a D_4-R_4' -group (D_4 and R_4' are as defined above), a D_1-R_4' -group (D_1 and R_4' are as defined above), a (b)- R_4' -group ((b) and R_4' are as defined above), a (c)- R_4' -group ((c) and R_4' are as defined above), a D_2-R_4 -group (D_2 and R_4 are as defined above), a D_3-R_4' -group (D_3 and R_4' are as defined above) or an A_2-CO-R_4 -group (A_2 and R_4 are as defined above);

(4) an A_8' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a $R_2-B_1-R_4'$ -group (R_2 , B_1 and R_4' are as defined above), a D_4-R_4' -group (D_4 and R_4' are as defined above), a D_5-R_4 -group (D_5 and R_4 are as defined above), a D_1-R_4' -group (D_1 and R_4' are as defined above), a (b)- R_4' -group ((b) and R_4' are as defined above), a (c)- R_4' -group ((c) and R_4' are as defined above), a D_2-R_4 -group (D_2 and R_4 are as defined above), a NO_2-R_4 -group (R_4 is as defined above) or an A_2-CO-R_4 -group (A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxy group or an A_1-O -group [A_1 represents a $R_3-(CHR_0)_m-(B_2-B_3)_m'$ -group (R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1 -group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-

C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1')$ -group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3 is not a hydrogen atom}];

(ii) a D_5 group: an $O=C(R_3)$ -group (R_3 is as defined above), an $A_1-(O)_n-N=C(R_3)$ -group (A_1 , N and R_3 are as defined above), a $R_1-B_0-CO-R_4-(O)_n-N=C(R_3)$ -group [R_1 , R_4 , n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')$ -group (R_1' and m are as defined above)], a $D_2-R_4-(O)_n-N=C(R_3)$ -group (D_2 , R_4 , n and R_3 are as defined above) or a $R_1A_1N-N=C(R_3)$ -group (R_1 , A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1-O)_k-A_1N-(O)_{k'}$ -group (R_1 and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$ -group (R_1 , R_1' , N and A_1 are as defined above), an $A_1N=C(-OR_2)$ -group (A_1 and R_2 are as defined above) or a NH_2-CS -group;

(v) a D_3 group: a nitro group or a R_1OSO_2 -group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4 -group

[A₃ represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkynyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a R_a-(R₄)_m-group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R₄ and m are as defined above), or a C1-C10 alkyl group substituted with a (b)-R₄-group ((b) and R₄ are as defined above), a (c)-R₄-group ((c) and R₄ are as defined above), a R₂-B₁-R₄-group (R₂, B₁ and R₄ are as defined above), a D₄-R₄-group (D₄ and R₄ are as defined above), a D₅-group (D₅ is as defined above), a D₁-R₄-group (D₁ and R₄ are as defined above), a D₂-group (D₂ is as defined above), a D₃-R₄-group (D₃ and R₄ are as defined above) or an A₄-SO₂-R₄-group {A₄ is as defined above, and R₄ is as defined above},

B₄ represents an oxy group, a thio group or a -N((O)_mR₁)-group (R₁ and m are as defined above), provide that when A₄ is a thio group, then A₃ is not a hydrogen atom];

2) a R₁-B₄-CO-R₄-B₄'-group (R₁, B₄ and R₄ are as defined above, B₄' is the same as or different from B₄, and has the same meaning as B₄, provided that when B₄ is a thio group, then R₂ is not a hydrogen atom) or a D₂-R₄-B₄-group (D₂, R₄

and B_4 are as defined above);

3) a R_2 -SO₂-NR₁-group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above);

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above) or

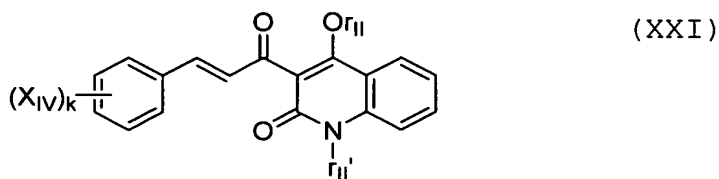
6) a R_1A_1N -NR₁'-group (R_1 , A_1 and R_1' are as defined above);

V. T_A represents a hydrogen atom, an A_9' -group (A_9' is as defined above), a D_5 - R_4 -group (D_5 and R_4 are as defined above) or a M_c -group (M_c is as defined above);

10 VI. M_a' is the same as or different from M_a , and has the same meaning as that of M_a , and r represents 0, 1, 2, 3 or 4, provided that when an A ring is a benzene ring, then q is not 0 and, when an A ring is a benzene ring or a pyridine ring, then p and q are not 0 at the same time, in
15 either case; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of
20 substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

21. A I type collagen gene transcription suppressing composition, which comprises a 2(1H)-quinolinone compound
25 represented by the formula (XXI):

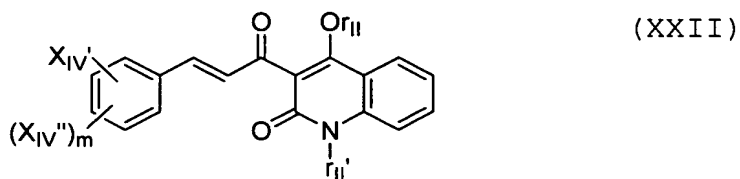


[wherein X_{IV} represents a hydrogen atom, or a hydroxy group, or a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a C2-C4 alkenyl group, or a C2-C4 alkynyl group, or a C1-C4 alkoxy group, or a $R_I-S(O)_1$ -group (R_I represents a C1-C4 alkyl group, and 1 represents an integer of 0 to 2), or a nitro group, or a cyano group, or a carboxy group, or a C1-C4 alkoxy carbonyl group, or a $(R_I)_2N$ -group (R_I is as defined above), or a $R_I-CO-NH$ -group (R_I is as defined above), or a $R_I-O-CO-NH$ -group (R_I is as defined above), or a $R_I NH-CO-NH$ -group (R_I is as defined above), or a $(R_I')_2N-CO$ -group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), k represents an integer of 1 to 4 and, when k is an integer of 2 to 4, X_{IV} 's may be different, and r_{II} and r_{II}' are the same or different, and represent a hydrogen atom or a C1-C4 alkyl group];

and an inert carrier;

22. A 2(1H)-quinolinone compound represented by the

formula (XXII):



[wherein X_{IV}' represents a C2-C4 alkyl group, or a C1-C4 alkyl group substituted with a halogen atom or a C1-C4 alkoxy group, or a C2-C4 alkenyl group, or a C2-C4 alkynyl group, or a C2-C4 alkoxy group, or a $R_I-S(O)_1$ -group (R_I represents a C1-C4 alkyl group, and 1 represents an integer of 0 to 2), or a cyano group, or a carboxy group, or a C2-C4 alkoxy carbonyl group, or a $(R_{II})_2N$ -group (R_{II} represents a C2-C4 alkyl group), or a $R_I-CO-NH$ -group (R_I is as defined above), or a $R_I O-CO-NH$ -group (R_I is as defined above), or a $R_I NH-CO-NH$ -group (R_I is as defined above), or a $(R_I')_2N-CO$ -group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), or a RB -group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), X_{IV}'' represents a hydrogen atom, a halogen atom, a C1-C4 alkyl group or a C1-C4 alkoxy group, m represents 1 or 2 and, when m is 2, X_{IV}'' 's may be different, and r_{II} and r_{II}' are the same or different, and represent a hydrogen atom or a C1-C4 alkyl group];

23. Use of a compound according to claims 5, 6, 8, 9,

11, 12, 13, 14, 16, 18, 20 or 22, as an active ingredient for suppressing transcription of a Type I collagen gene;

24. Use of a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22, as an active ingredient
5 for decreasing expression of a Type I collagen gene to induce a reduction in accumulation of collagen and thereby improving tissue fibrosis;

25. A composition for improving tissue fibrosis, which comprises a compound according to claims 5, 6, 8, 9, 11, 12,
10 13, 14, 16, 18, 20 or 22, and an inert carrier;

26. A method for improving tissue fibrosis, which comprises administering an effective amount of a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22 to a mammal in need thereof;

15 27. Use of a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22, as an active ingredient for suppressing the activity of TGF- β ;

28. A composition for suppressing the activity of TGF- β , which comprises a compound according to claims 5, 6, 8,
20 9, 11, 12, 13, 14, 16, 18, 20 or 22, and an inert carrier;

29. Use of a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22, as an active ingredient for inhibiting a promoting effect of TGF- β on transition to a hair regression phase to induce extension of a hair
25 growth phase and thereby providing hair-growing effect;

30. A composition for hair growth which comprises a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22, and an inert carrier;

31. A method for growing hair, which comprises
5 administering an effective amount of a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22 to a mammal in need thereof;

32. Use of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, as an active ingredient for
10 suppressing transcription of a Type I collagen gene;

33. Use of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, as an active ingredient for decreasing expression of a Type I collagen gene to induce a reduction in accumulation of collagen and thereby improving
15 tissue fibrosis;

34. A composition for improving tissue fibrosis, which comprises a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, and an inert carrier;

35. A method for improving tissue fibrosis, which
20 comprises administering an effective amount of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21 to a mammal in need thereof;

36. Use of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, as an active ingredient for
25 suppressing the activity of TGF- β ;

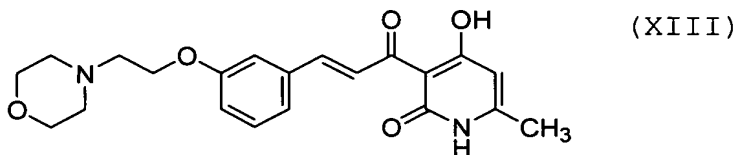
37. A composition for suppressing the activity of TGF- β , which comprises a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, and an inert carrier;

38. Use of a compound according to claims 1, 2, 3, 4, 5 7, 10, 15, 17, 19 or 21, as an active ingredient for inhibiting a promoting effect of TGF- β on transition to a hair regression phase to induce extension of a hair growth phase and thereby providing hair-growing effect;

39. A composition for hair growth which comprises a 10 compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, and an inert carrier;

40. A method for growing hair, which comprises administering an effective amount of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21 to a mammal 15 in need thereof;

41. A 2(1H)-pyridinone compound represented by the formula (XXIII):



42. A 2(1H)-pyridinone compound represented by the formula (XXIV):

